



JULY 2000



# FY99 BRAC CLEANUP PLAN ABSTRACT ANALYSIS



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# Acronyms

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<b>BCP</b>	BRAC Cleanup Plan
<b>BCT</b>	BRAC Cleanup Team
<b>BEC</b>	BRAC Environmental Coordinator
<b>BRAC</b>	Base Realignment and Closure
<b>BTC</b>	Base Transition Coordinator
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>DLA</b>	Defense Logistics Agency
<b>DoD</b>	Department of Defense
<b>EBS</b>	Environmental Baseline Survey
<b>ETA</b>	Early Transfer Authority
<b>FOSL</b>	Finding of Suitability to Lease
<b>FOST</b>	Finding of Suitability to Transfer
<b>FY</b>	Fiscal Year
<b>GSA</b>	General Services Administration
<b>LRA</b>	Local Redevelopment Authority
<b>LUC</b>	Land Use Control
<b>NCR</b>	Natural and Cultural Resources
<b>NEPA</b>	National Environmental Policy Act
<b>NPL</b>	National Priorities List
<b>POL</b>	Petroleum, Oils, and Lubricants
<b>RAB</b>	Restoration Advisory Board
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RIP</b>	Remedy in Place
<b>RMIS</b>	Restoration Management Information System
<b>RPM</b>	Remedial Project Manager
<b>U.S. EPA</b>	U.S. Environmental Protection Agency
<b>UXO</b>	Unexploded Ordnance

# Executive Summary

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Starting with the Defense Authorization Amendments and Base Closure and Realignment Act of 1988, the Base Realignment and Closure (BRAC) process has been responsible for the closure or realignment of 497 domestic military installations. To facilitate successful closure or realignment of a BRAC installation, the Department must successfully manage many integrated components of the program.

Environmental restoration is a key component of the BRAC process. The Office of the Secretary of Defense for Environmental Security provides management oversight for environmental restoration at closing and realigning military installations. Of the 497 designated BRAC installations, 206 require some type of environmental restoration work. Governed by a specific set of federal laws and regulations, environmental restoration at these installations involves contaminant identification, investigation, and cleanup. As of the end of fiscal year 1999 (FY99), environmental restoration requirements are completed at 54 percent of all BRAC sites, and the program is on track to have almost all sites remediated by FY05.

The purpose of BRAC is to reduce excess military infrastructure. By making property available for transfer, the Department of Defense (DoD) facilitates the reuse of former military installations to the benefit of adjacent communities. To prepare for the transfer of the property from DoD to another entity, DoD uses future reuse options identified by local communities as the basis for its analysis. The local community drafts a reuse plan that outlines how it intends to redevelop and use the property. An important environmental restoration milestone at a BRAC installation is the completion of the environmental analysis required by the National Environmental Policy Act. By the end of FY99, over 80 percent of BRAC installations had completed this analysis.

The goal of BRAC environmental cleanup is to protect human health and the environment while facilitating the transfer of surplus DoD property to non-military entities. In FY99, DoD transferred almost 38 percent more acres than in FY98, and it expects an increasing percentage of BRAC installation acreage to be transferred in coming years. While property reuse can include both leasing and deeding of property, DoD prefers deed transfers because they bring closure to the BRAC process. DoD has been successful in reducing the amount of BRAC property it leases out; it leased out 26 percent fewer acres in FY99 than in FY98.

# Background and Purpose

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To eliminate excess infrastructure and reduce operating costs, Congress authorized four rounds of base closures between 1988 and 1995. The first Base Realignment and Closure (BRAC) round was conducted in 1988 based on recommendations by the Defense Secretary's Commission on Base Realignment and Closure. Recognizing that additional base realignments and closures would be necessary in the future, Congress enacted the Defense Base Closure and Realignment Act of 1990 to allow further reductions in the number of military bases.

The 1990 Act established an independent Defense Base Closure and Realignment Commission, "to provide a fair process that will result in the timely closure and realignment of military bases inside the United States." The commissions met in 1991, 1993, and 1995 to develop a list of military installations to be closed or realigned. The objective of these closures was to allow DoD to maintain an appropriate level of readiness while modernizing the military. The four rounds of BRAC are referred to as BRAC 1988, BRAC 1991, BRAC 1993, and BRAC 1995, indicating the year in which each set of military bases was selected for realignment and closure. These four rounds are expected to reduce DoD's domestic military base infrastructure by 20 percent by the year 2001.

## THE BRAC PROCESS

DoD's BRAC process facilitates property reuse by transferring BRAC properties to local communities for beneficial redevelopment. The BRAC process is managed by the Office of the Under Secretary of Defense for Acquisition and Technology. Within this office, the Office of the Deputy Under Secretary of Defense for Installations has overall responsibility for the BRAC process, including the real estate aspects of the program, such as transferring property, while the Office of the Deputy Under Secretary of Defense for Environmental Security has responsibility for the policy and oversight of the environmental aspects of the BRAC process.

## ENVIRONMENTAL RESTORATION

In total, 497 major and minor installations are slated for realignment or closure as a result of the four BRAC rounds. Of these 497 BRAC installations, 206 require some type of environmental restoration. Of the 206 BRAC installations that require environmental restoration, 112 account for 96 percent of the property DoD plans to transfer or

How BRAC installations are selected for inclusion in this analysis.

# Background and Purpose

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has already transferred. These 112 installations are the primary focus of this analysis, since they contain most of the BRAC property and receive most of the BRAC environmental restoration funding.

Each of these 112 major BRAC installations in the environmental restoration program must prepare and maintain a BRAC Cleanup Plan (BCP) that summarizes the installation's cleanup objectives and requirements, integrating the intended reuse of the property with environmental cleanup. The BCP is a living document, which is updated as cleanup progresses or reuse priorities change. As a reporting requirement, each of these major BRAC installations prepares a BCP abstract every year summarizing the installation's BRAC environmental restoration activities and progress. The Army, Air Force, Navy, and Defense Logistics Agency (collectively, the Components) submit these abstracts to the Office of the Deputy Under Secretary of Defense for Environmental Security at the end of each fiscal year.

This BCP Abstract Analysis examines the BCP abstracts submitted for FY99. It summarizes the status of the BRAC portion of the Defense Environmental Restoration Program and evaluates how effectively environmental activities facilitate productive reuse of the property at the 112 major BRAC installations. Data for this analysis come from the installation BCP abstracts and from DoD's Restoration Management Information System database. This BCP analysis is divided into three sections: BRAC Environmental Program Overview; Major BRAC Installations; and Policy, Guidance, and Initiatives.

Contents of the BCP  
Abstract Analysis explained.

*BRAC Environmental Program Overview* provides overall information on the BRAC portion of the Defense Environmental Restoration Program, including the status of all sites at the 206 BRAC installations undergoing environmental restoration. A site is a discrete parcel of land on a military installation where cleanup of contamination or investigation of possible contamination is under way. This section tracks the progress of these sites through the cleanup process. This section also discusses the federal property and environmental laws that govern the disposal of BRAC installations and the funding of BRAC environmental restoration.

*Major BRAC Installations* focuses on the 112 major installations in this program. This section presents an overview of these installations and the status of their environmental restoration activities, based on the information provided in the Components' BCP abstract submittals. This section also discusses the steps that are necessary for the transfer of BRAC installation property from DoD to



**WorldWideWeb**

**Defense Environmental  
Network and Information  
Exchange (DENIX):**

[http://www.denix.osd.mil/  
denix/denix.html](http://www.denix.osd.mil/denix/denix.html)

**DoD Environmental  
Cleanup:**

<http://www.dtic.mil/envirodod/>

**BRAC Environmental  
Cleanup section of DoD  
Environmental Cleanup:**

[http://www.dtic.mil/envirodod/  
brac](http://www.dtic.mil/envirodod/brac)

a non-military entity, the issues that may impact transfer, and alternatives that allow for earlier property transfer.

*Policy, Guidance, and Initiatives* highlights policy, guidance, and initiatives implemented in FY99 to improve environmental restoration at BRAC installations. In addition, this section details efforts that are planned for FY00.

The appendixes present more detailed information on environmental restoration efforts at BRAC installations, including site status and cleanup phase duration. The appendixes also provide backup data that support the summaries and analyses in this document.

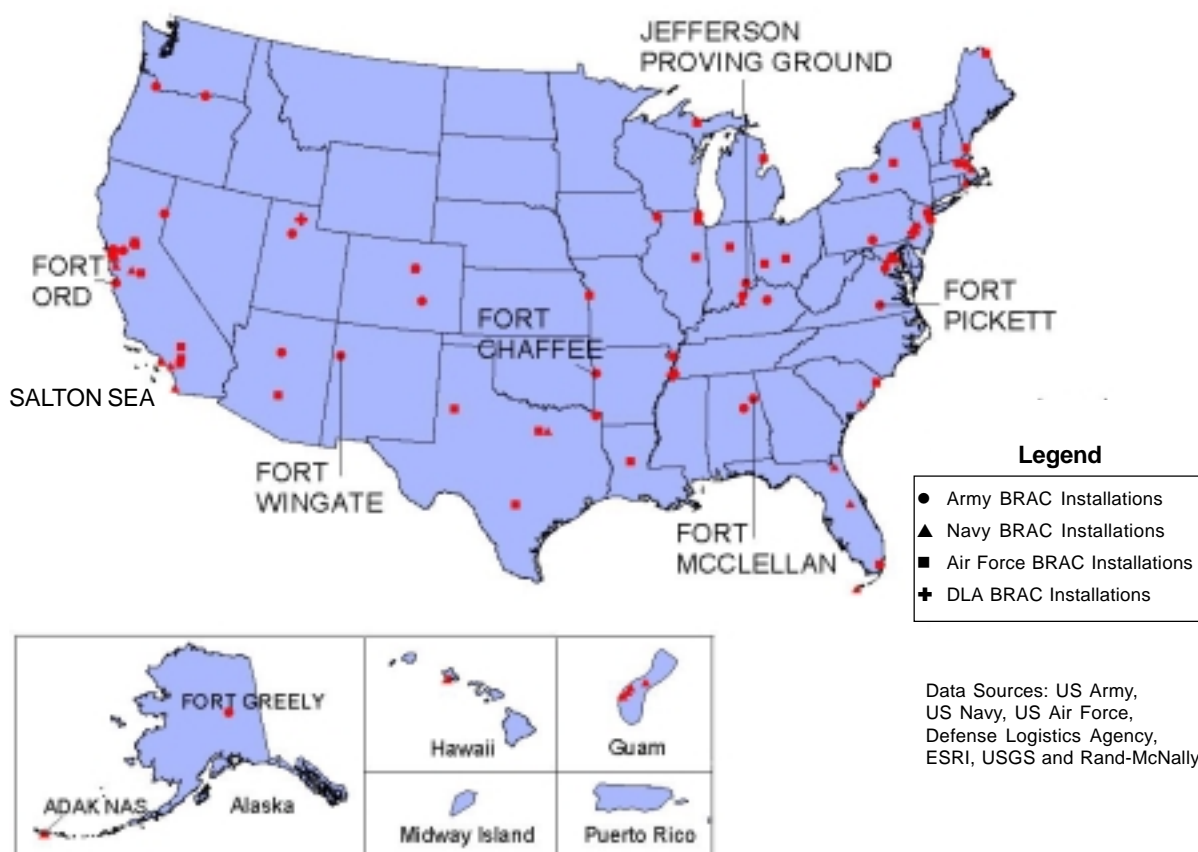
# BRAC Environmental Program Overview

The 206 BRAC installations undergoing environmental restoration are collectively transferring 403,593 acres of property from DoD to non-military entities. These installations vary in size and are located throughout the United States and its territories. Figure 1 highlights the five BRAC installations with the most acreage and the five BRAC installations with the most acreage planned for transfer.

## The Five States with the Most BRAC Installations

California	27
New York	7
Texas	7
Massachusetts	5
Virginia	5

**Figure 1  
BRAC Highlights**



## Five Largest BRAC Installations in Terms of Total Acreage

Fort Greely, AK	640,000 acres
Adak, AK	76,800 acres
Fort Chaffee, AR	71,359 acres
Jefferson PG, IN	55,270 acres
Fort Pickett, VA	45,160 acres

## Five BRAC Installations with the Most Acreage Leaving DoD

Adak, AK	73,923 acres
Fort Ord, CA	26,990 acres
Fort Wingate, NM	22,120 acres
Salton Sea Test Range, CA	19,410 acres
Fort McClellan, AL	18,634 acres



# BRAC Environmental Program Overview

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## LEGAL REQUIREMENTS

The disposal of property at BRAC installations undergoing realignment or closure is governed by federal property and environmental laws. The Federal Property and Administrative Services Act of 1949 specifies the process for disposing of federal property and authorizes disposal through a variety of means (e.g., federal-to-federal transfers, public benefit transfers, and public sale).

To successfully transfer BRAC property to a non-military entity, DoD must also comply with two key federal environmental laws: the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, and the National Environmental Policy Act (NEPA).

### ***The Comprehensive Environmental Response, Compensation, and Liability Act***

CERCLA was enacted to address instances of past contamination and establishes a process for remediating hazardous substances released into the environment. When it established the Defense Environmental Restoration Program, Congress directed DoD to conduct environmental cleanup in accordance with CERCLA. Additionally, CERCLA itself requires that cleanup efforts at federal facilities be conducted according to CERCLA requirements. For these reasons, and in order to have a common framework for managing a large national cleanup program, DoD follows CERCLA as the primary legislative authority for managing cleanup at military installations. As the lead agency for cleanups conducted under CERCLA at military installations, DoD can also take advantage of existing CERCLA mechanisms (such as removal actions) to expedite cleanup. Of the 206 BRAC installations requiring environmental restoration, 35 are on the National Priorities List (NPL), the U.S. Environmental Protection Agency's (U.S. EPA) list of high priority cleanup areas (see Table A2, Appendix A).

Property becomes subject to CERCLA when there is a release, or a substantial threat of a release, of a hazardous substance. Once such contamination is found, CERCLA requires that all necessary remedial actions be taken to protect human health and the environment. Before property can be transferred from DoD to a non-federal entity, hazardous substances must be remediated pursuant to CERCLA to ensure that they no longer pose a threat to human health and the environment. The one exception to this requirement

# BRAC Environmental Program Overview

is a transfer using Early Transfer Authority (CERCLA Section 120(h)(3)). If property is transferred using this authority, ownership can be transferred to a non-federal entity before cleanup is completed.

## ***The National Environmental Policy Act***

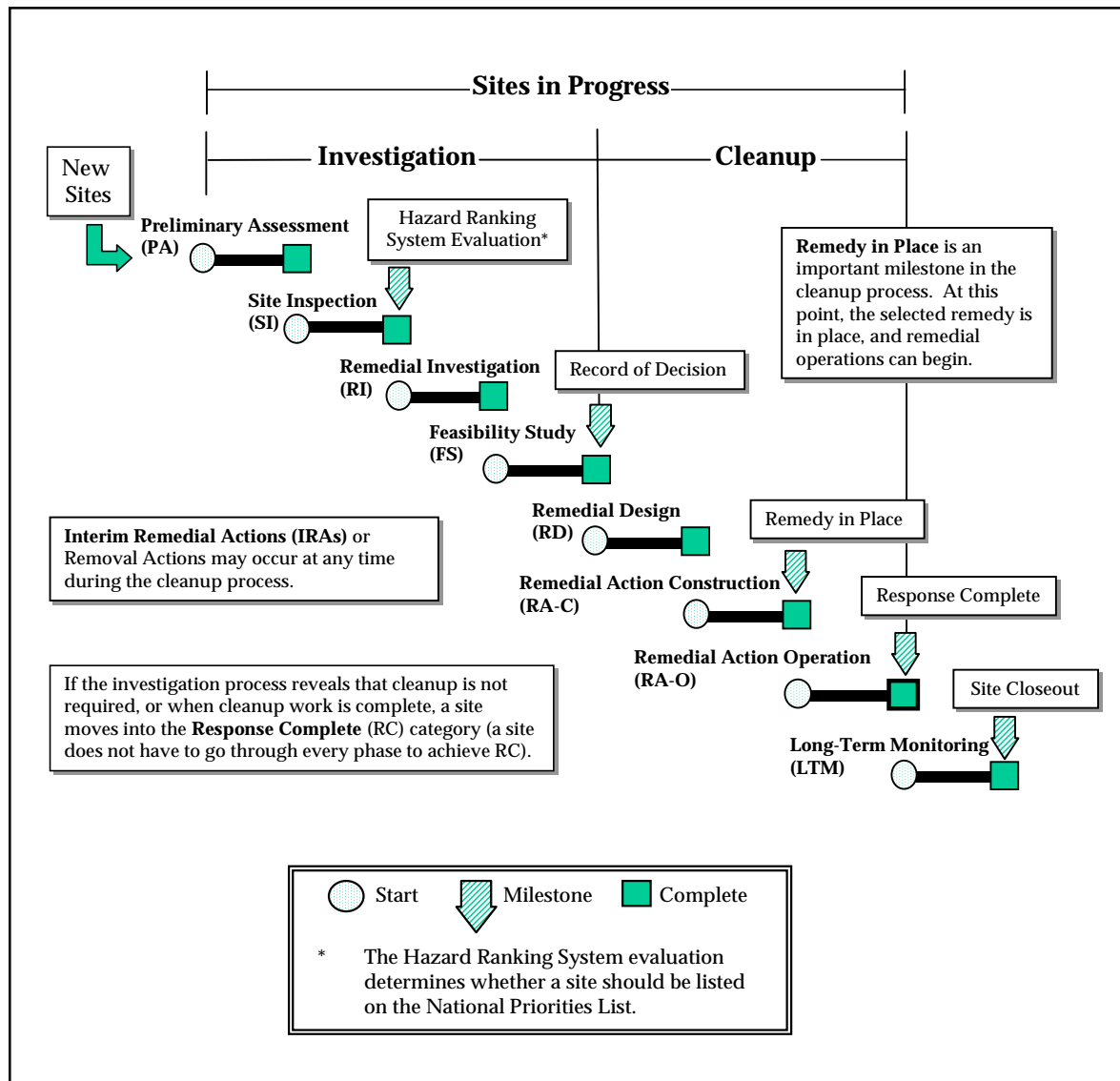
The other major federal environmental law relating to the transfer of BRAC property is NEPA. NEPA requires federal agencies to evaluate the environmental impacts of major actions, in this case, the disposal of property at closed military facilities. DoD cannot transfer BRAC property before completion of a NEPA analysis. According to NEPA, either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) must be conducted at all BRAC installations. Installations can initiate an EA, a study to determine whether the property disposal will have significant environmental impacts. If the EA determines that there are no significant impacts, no further analysis is required. An installation may conduct an EIS, a more comprehensive environmental analysis, if it is deemed necessary from the start or if the EA concludes that there could be significant environmental impacts from the proposed property reuse.

## **ENVIRONMENTAL RESTORATION AT BRAC INSTALLATIONS**

In most instances, a BRAC installation encompasses multiple environmental restoration sites requiring different remedial activities. Figure 2 depicts the general order in which restoration activities occur at a site. The restoration process starts with site identification by investigation of potential contamination. The various investigation or study phases end with a remedy selection documented in a Record of Decision. The selected remedy can be a no further action determination if investigation has shown that cleanup is not needed. The site reaches the Response Complete milestone when investigation has shown that remedial action is not needed or that cleanup objectives have been met through remedial action. Some sites may require the operation of a remedy before reaching the cleanup objectives; for these sites, Remedy in Place is an important milestone that indicates that the selected remedy has been constructed and is functioning properly and performing as designed. Once a site reaches Response Complete, it may require long-term monitoring and 5-year reviews to ensure that cleanup objectives continue to be met. The Site Closeout milestone is reached when

# BRAC Environmental Program Overview

**Figure 2**  
**Restoration Process Phases and Milestones**

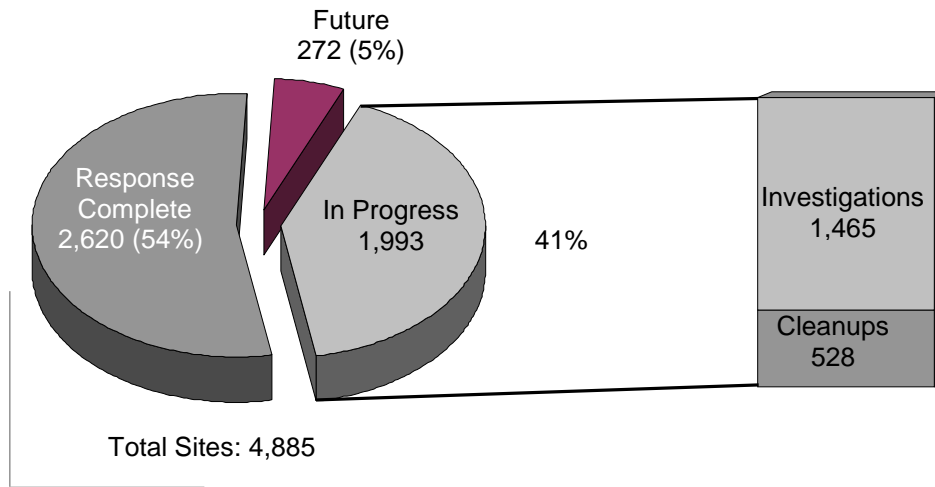


DoD no longer needs to monitor the site. A site does not need to go through every phase to reach the Response Complete or site closeout milestones.

DoD either has addressed or is addressing nearly 100 percent of the BRAC environmental restoration sites. As shown in Figure 3, 54 percent of BRAC sites are at Response Complete. This is a 21 percent increase over the number of sites that had reached Response Complete as of the end of FY98. At the end of FY99,

# BRAC Environmental Program Overview

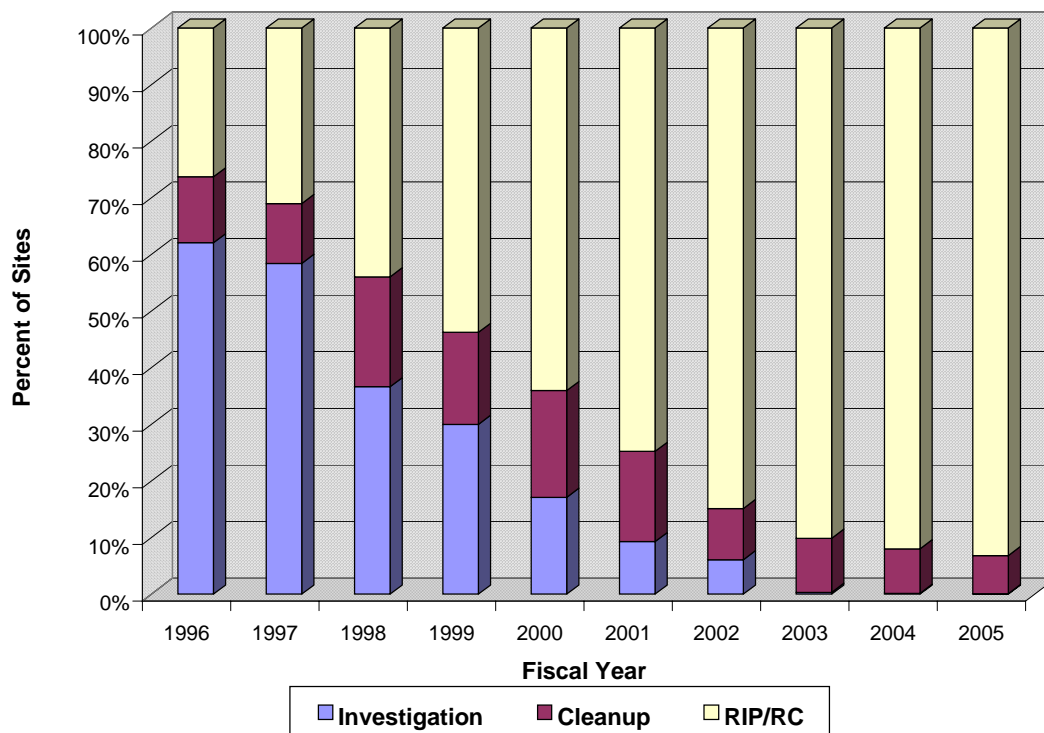
**Figure 3**  
**BRAC Overall FY99 Site Status**



272 sites had preliminary assessment start dates planned for the future or were between environmental restoration phases. All other sites are in the process of being investigated or cleaned up.

Figure 4 shows the historical and projected progress of BRAC sites through the environmental restoration process. The increasing number of sites in Response Complete indicates that BRAC

**Figure 4**  
**Phase Progress of Sites from FY96 to FY05**



# BRAC Environmental Program Overview

environmental restoration work is nearing completion, although some sites may have ongoing remedial action-operations or long-term monitoring for some years into the future. Completion of environmental restoration work means that CERCLA will not pose an impediment to property transfer. As of the end of FY99, a significant portion of BRAC property was suitable for transfer according to CERCLA. The remaining environmental restoration work is on less than 18 percent of BRAC property. See the Tracking Progress section of this report for more information and discussion on environmental suitability to transfer.



**WorldWideWeb**

**Information on the relative-risk framework can be found on the DoD cleanup Web site:**

<http://www.dtic.mil/envirodod/>

## ***Addressing the Highest Relative-Risk Sites***

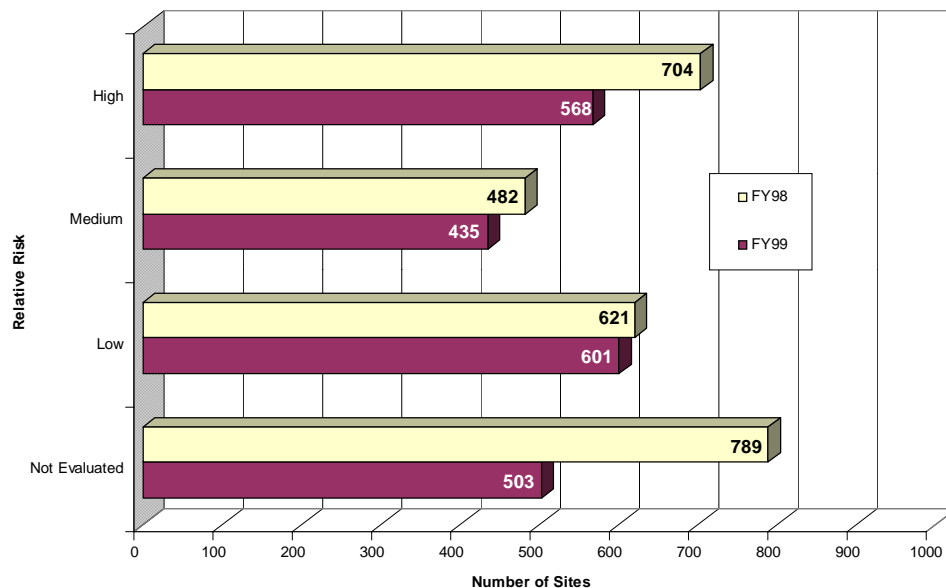
In the early 1990s, DoD recognized the need for a consistent approach to prioritizing and sequencing environmental restoration work to ensure that the sites in most urgent need of remediation were addressed first. As a result, in 1994 DoD implemented the Relative-Risk Site Evaluation framework. According to this site prioritization system, sites are grouped into high, medium, and low relative-risk categories based on the amount and type of contaminants present, the potential for the contaminants to migrate from the source, and the potential impact on human health and the environment.

At BRAC installations, in general, sequencing sites for cleanup is based on both relative-risk and reuse factors. As is true for DoD's entire environmental restoration program, the first priority is imminent threats to human health and the environment—there are no such threats at BRAC installations. In the absence of a reuse plan or approved reuse, the relative-risk methodology provides the framework for prioritizing cleanup at BRAC installations.

Comparing the number of sites in each relative-risk category from year to year gives DoD another way to measure its progress in reducing potential threats to human health and the environment at its BRAC installations. A reduction in the number of sites in the high relative-risk category is particularly important because it represents a decline in possible threats to human health and safety. As Figure 5 shows, the environmental restoration work done in FY99 resulted in a decrease in all relative-risk categories; especially noteworthy is the 19 percent drop in BRAC high relative-risk sites.

# BRAC Environmental Program Overview

**Figure 5**  
**BRAC Relative-Risk Site Evaluation Progress**



## ***Fast-Track Cleanup***

In the past 10 years DoD has made significant progress toward completing environmental restoration activities at BRAC installations. When the BRAC cleanup effort began with the first round of installations in 1988, the objectives were clear—successful environmental cleanup and making property available for transfer to non-military owners. The process for achieving these goals was less well defined.

BRAC environmental restoration efforts were greatly assisted by the Community Reinvestment Program established by President Clinton in July 1993. The intent of this program was to speed the economic recovery of communities affected by closure and realignment of bases. The program integrates economic development and transition assistance and environmental restoration to promote the local reuse of BRAC installation property. The five major elements of the program are—

- Job-centered property disposal that puts local economic redevelopment first
- Fast-track cleanup that removes needless delays, while protecting human health and the environment
- Transition coordinators at every base slated for closure
- Easy access to transition and redevelopment help for workers and communities
- Larger economic development planning grants to base closure communities.

# BRAC Environmental Program Overview

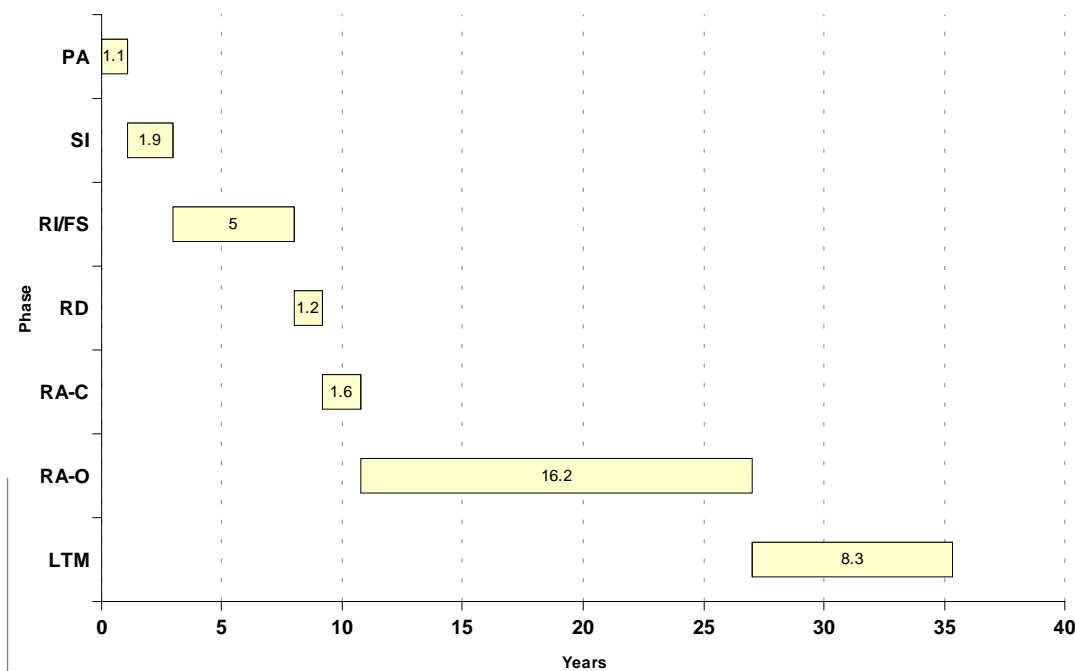
One part of this program, fast-track cleanup, focuses on expediting cleanup at BRAC installations while protecting human health and the environment. Three overarching principles reflect the goals of the fast-track cleanup initiative:

Early, consistent, and frequent communication and coordination among DoD, regulators, and the community is essential to the success of the fast-track cleanup initiative.

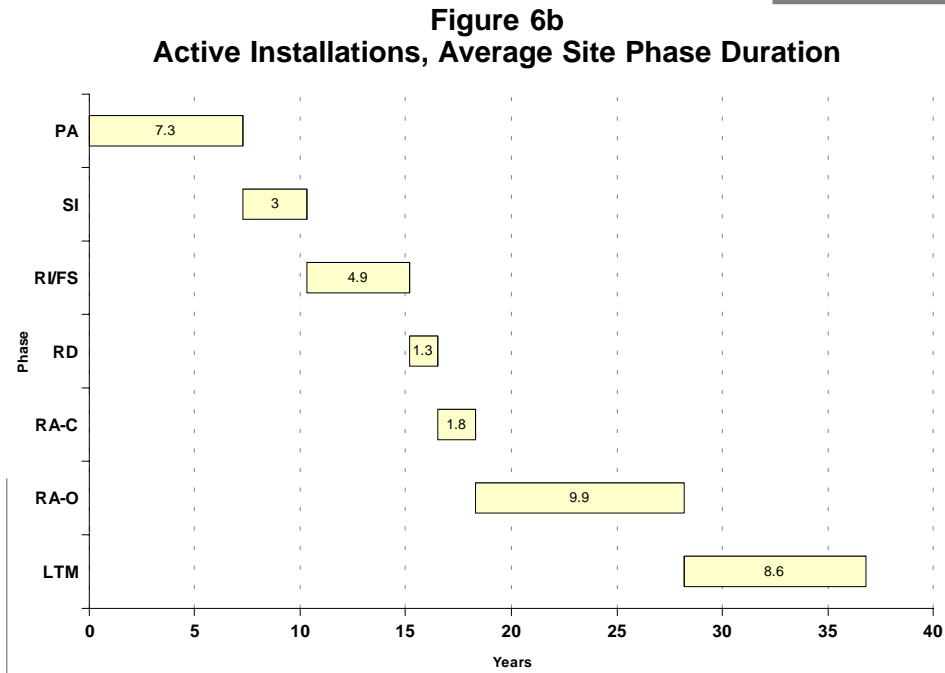
- Protect human health and the environment
- Make property available for reuse and transfer as soon as possible
- Provide for effective community involvement.

The foundation of the fast-track cleanup initiative is teamwork and partnering between DoD, state and federal regulators, and the community. This initiative has helped DoD carry out environmental restoration activities at BRAC installations efficiently and expeditiously while facilitating property reuse and redevelopment. A comparison of environmental restoration activities at active military installations and BRAC installations shows that BRAC installations are progressing through the investigation phase and reaching the cleanup phase faster than are active installations (Figures 6a and 6b). Appendix C provides additional information on phase durations, including graphs showing BRAC and active installation phase duration by Component.

**Figure 6a**  
**BRAC Installations, Average Site Phase Duration**



# BRAC Environmental Program Overview



## Funding

Closure-related BRAC environmental activities are funded from the overall BRAC account. BRAC environmental funding encompasses more than environmental restoration efforts; it also addresses closure-related environmental compliance, environmental planning, and program management and support. The BRAC account itself is part of DoD's overall Military Construction appropriations. To ensure maximum flexibility, and in keeping with management of the Military Construction account, BRAC funding is provided in 5-year appropriations, and funds are not dedicated to a specific BRAC activity. However, since FY96, Congress has specified an upper funding limit for BRAC environmental funding.

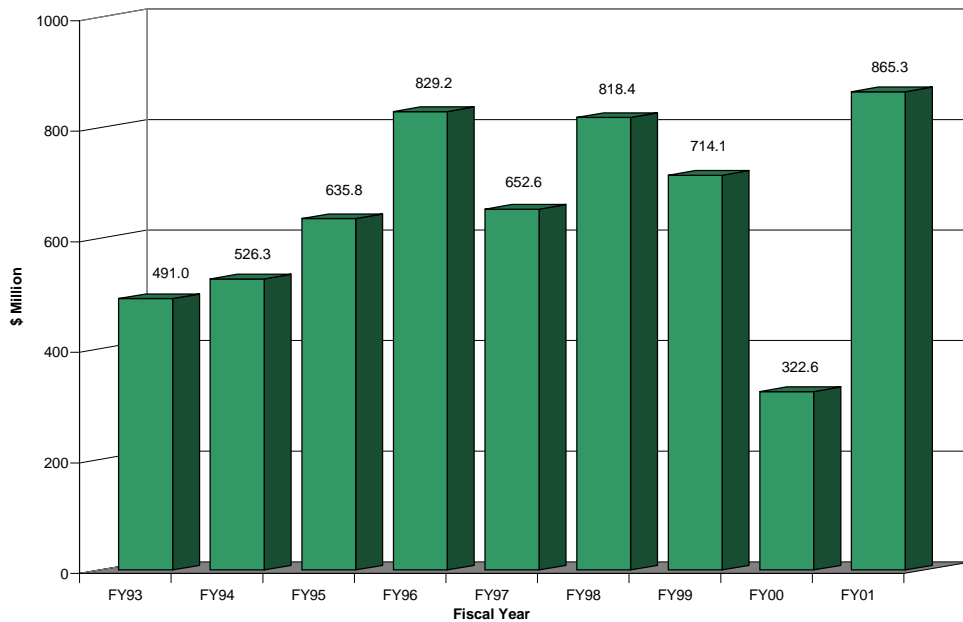
By the end of FY99, DoD had invested almost \$5.6 billion in environmental efforts at BRAC installations. DoD realigned funding during FY99 execution, and the current estimate for the FY99 BRAC environmental effort is about \$714 million. Figure 7 shows actual and projected BRAC environmental funding levels from FY93 to FY01.

BRAC environmental funding has increased over time with the addition of installations in each new BRAC round. The funding peaked in FY96 with the addition of BRAC 95 installations. Annual environmental allocations are set by balancing environmental requirements against other BRAC-related requirements. Environmental funding needs have also varied year-to-year, as installations from each round have completed closure-related compliance and planning activities and have moved from studies to cleanup.



# BRAC Environmental Program Overview

**Figure 7**  
**Actual and Projected BRAC Environmental Funding Allocations**  
**from FY93 to FY01**



## **FY00 Plan and FY01 Request**

From FY00 to FY01, BRAC environmental funding increases from \$322.6 million (FY00) to \$865.3 million (FY01), a difference of \$542.7 million. However, the FY01 funding level provides for completion of projects begun in FY00 as well as fully funding the FY01 projects. When the financing to complete FY00 projects is removed from the FY01 estimate, the FY01 program actually decreases by about \$200 million. This roughly \$200 million decrease for the BRAC program reflects a refinement of cost estimates, re-phasing of the environmental restoration schedule, and reapplication of cost savings from prior BRAC projects.

DoD is striving to complete scheduled base closures as rapidly as possible to realize potential savings to the government and to make property available to local communities for redevelopment. Congressional support for the FY01 funding level is essential to the integrity of the BRAC program.

# Major BRAC Installations

The remainder of this analysis focuses on the 112 major BRAC installations that account for the vast majority of BRAC environmental restoration sites and acreage. These 112 major BRAC installations are transferring 389,741 acres from DoD to non-military entities, in other words, 96 percent of the total BRAC acres to be transferred out of DoD. This section presents an overview of the 112 installations, a description of cleanup program management and the cleanup process, and a general discussion of environmental issues affecting these major BRAC installations. Appendix A provides a summary of the end-of-year FY99 data from the BCP abstracts submitted by the Components.

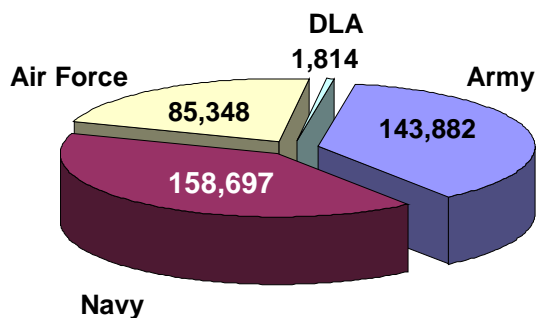
Figure 8 shows a breakdown of the 112 major BRAC installations according to the BRAC round in which they were selected for closure and the Component. Figures 9 and 10 show breakdowns of the combined acreage of these installations by Component and BRAC round, respectively. Table A1 (Appendix A) lists the installations submitting FY99 BCP Abstracts.

**Figure 8**  
**BRAC Installations by Component and BRAC Round**

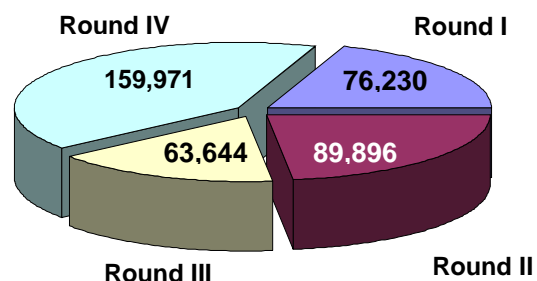
BRAC Round	Number of Installations				Total
	Army	Navy	Air Force	DLA	
I (1988)	11	3	5	--	19
II (1991)	5	9	14	--	28
III (1993)	3	19	6	1 *	29
IV (1995)	20	10	4	2	36
Total	39	41	29	3	112

\*As of end of FY98, Gentile AFS was reclassified as Air Force instead of DLA.

**Figure 9**  
**Acres to Transfer Out of DoD  
by Component**



**Figure 10**  
**Acres to Transfer Out of DoD  
by BRAC Round**



### **MAKING FAST-TRACK CLEANUP WORK: THE BRAC CLEANUP TEAM**

A valuable innovation implemented under the fast-track cleanup initiative was the BRAC Cleanup Team (BCT). At each major BRAC installation, a BCT coordinates fast-track cleanup and is the primary forum for addressing issues that affect the execution of cleanup in support of reuse. Typically the BCT is composed of the DoD BRAC environmental coordinator and both the U.S. EPA and state remedial project managers. The BCT is charged with developing common environmental cleanup goals and then making decisions and setting priorities based on those goals. The BCT concept was created to foster partnerships between the installation and its regulatory agencies and to find ways of accelerating cleanup actions to quickly make installation property available for transfer and reuse, while continuing to protect human health and the environment.

### **PARTNERING EFFORTS BETWEEN THE BCT AND THE COMMUNITY**

In the past 6 years, partnerships between affected communities and BCTs have become the foundation for the cleanup and reuse process. The BCT works with the base transition coordinator and the local redevelopment authority (LRA) to develop and implement a cleanup program that facilitates redevelopment. Formed by local or state government and recognized by DoD, the LRA is the public entity responsible for representing the community's interests and developing or implementing the reuse plan for the installation. The LRA is often the recipient of the property as well. The base transition coordinator is appointed by DoD to work as an ombudsperson for the community and often acts as liaison between the BCT and the LRA. The base transition coordinator is responsible for ensuring that property disposal and reuse issues are closely coordinated with environmental restoration initiatives, thereby enabling property to be transferred as efficiently as possible.

The BCT also works with the restoration advisory board (RAB), which provides a conduit for essential public participation in the cleanup process. RABs are composed of representatives of local agencies, community members, and representatives from the installation. A RAB provides a forum for discussion and exchange of information about BRAC cleanup activities among the installation, regulatory agencies, and the community. RABs exist to provide input in the BRAC environmental restoration process as key cleanup

# Major BRAC Installations

decisions are made. DoD has found that working with communities is the most effective way to carry out its cleanup responsibilities at BRAC installations. This proactive stance helps minimize delays in the cleanup schedule that are likely to arise when BCTs do not involve stakeholders and address their needs early in the process.

Within the BRAC framework, the BCT and the LRA have different functions and priorities. DoD is responsible for making cleanup decisions, while the LRA is responsible for implementing a land reuse plan for the property. Before a BCT can respond to the reuse priorities of the LRA, the LRA must organize itself and coordinate with its community constituents to determine realistic redevelopment priorities. Cleanup decisions are not dictated by land use, but rather by regulatory requirements and environmental restoration technology. It is DoD policy, however, to consider the intended land use stated in approved community reuse plans, to the fullest extent reasonably practicable, in making cleanup decisions. For the BRAC process to be fully successful, cleanup decisions and reuse decisions should be closely coordinated and must both consider the past use of the property, fiscal and technical practicalities, and the community's preferred future use of the property. DoD officials, regulators, RABs, and LRAs must work together to reach cleanup and reuse decisions that are both compatible and practicable. The BCT should try to meet the LRA's needs, but ultimately it is the BCT, with guidance from DoD and regulatory agencies, that makes the cleanup decisions in compliance with regulatory requirements.

## Partnering at BRAC Installations

The partnerships DoD formed through the fast-track cleanup initiative have proved to be an effective tool for completing cleanup and supporting reuse—

At **Moffett Air Field** in California, members of the BCT started with the common goal of attending meetings to resolve issues. As the cleanup process progressed, the BCT members learned to trust one another by trading roles and “putting themselves in each other’s shoes.” By practicing careful listening, they were better able to understand the significant base closure issues and to learn from one another’s expertise and experience.

Similarly, at the **Army Research Laboratory-Woodbridge (Virginia)**, the BCT learned to work together and focus on the goal of transferring the installation property. Respecting each other’s experience, BCT members proceeded with an attitude of flexibility so they could “get around bumps in the road” in a mutually satisfactory manner. One of this installation’s greatest cleanup and redevelopment assets was an e-mail listserv that kept all participants informed.

## CLEANUP PROGRAM MANAGEMENT

The *BRAC Cleanup Plan (BCP)* is the installation-level document that outlines a base's plan for environmental remediation.

The *BCP Abstracts* are a data-reporting tool providing information on environmental status reuse support efforts for each installation and used to identify trends and track progress.

For BRAC environmental restoration installations, BCTs must continually optimize the cleanup process to ensure that the program meets its objectives in the most effective and efficient manner possible. The BCP is a BRAC installation's cleanup management plan, the road map that the BCT uses to expedite and improve environmental response actions and integrate them with redevelopment activities, plans, and schedules. Once the BCT has formed, it conducts a bottom-up review of the environmental program and an Environmental Baseline Survey of the installation's environmental condition. Based on the results, the BCT determines how best to accelerate cleanup and make property available for reuse. The Environmental Baseline Survey is the starting point for BRAC cleanup efforts since it establishes which sites are uncontaminated and which require either further evaluation or cleanup before property disposal can occur.

One key to successful and timely environmental restoration at BRAC installations is effective use of the BCP to integrate reuse needs with cleanup efforts. The BCT develops the initial BCP based on the Environmental Baseline Survey and is responsible for updates to reflect new requirements in the cleanup program, changes in reuse, and changes in the schedule. While the BCP should be reviewed every 9 to 18 months, this time frame is flexible, depending on the progress of the cleanup. At the end of FY99, the proportion of BCPs that had been updated at least once since the inception of fast-track cleanup was 78 percent, and the average age of all BCPs was 30 months. However, since FY97, only 13 BCPs have been updated, indicating that installations need to focus more on reevaluating and updating their plans for cleanup. The DoD Environmental Security Office has produced a fact sheet (*Updating the BRAC Cleanup Plan*) highlighting the sections of the BCP that BCTs should update regularly to ensure that the plan is a living document. Table A3 (Appendix A) depicts progress on updating BCPs.

A BCP abstract is a data-reporting tool that summarizes an installation's BCP and conveys key program management information. It is updated annually and is submitted by each Component to the DoD Environmental Security Office. The abstracts provide information on the environmental status and the reuse support efforts for each installation and are used to identify trends and track progress. All BCT members are required to review their installation's BCP abstracts. Fulfillment of this responsibility by all members demonstrates the BCT's high level of commitment

# Major BRAC Installations

to the installation cleanup program. In FY99, two-thirds of the abstracts were reviewed by all of their respective installations' BCT members. For Army, Air Force, and the Defense Logistics Agency combined, 94 percent of BCP abstracts were reviewed by all members of the BCT.

## TRACKING PROGRESS

Ensuring that BRAC acreage satisfies the conditions established in CERCLA for property transfer is an important indicator of environmental restoration progress at BRAC installations. To manage and track this, DoD developed an "environmental condition of property" classification tool (see box). This categorization scheme provides for a consistent DoD-wide description of BRAC property by type of contamination, status of the environmental restoration activities, and suitability or eligibility for transfer according to CERCLA.

### Environmental Condition of Property Categories

<b>CATEGORY 1:</b>	Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
<b>CATEGORY 2:</b>	Areas where only release or disposal of petroleum products has occurred.
<b>CATEGORY 3:</b>	Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.
<b>CATEGORY 4:</b>	Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.
<b>CATEGORY 5:</b>	Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken.
<b>CATEGORY 6:</b>	Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.
<b>CATEGORY 7:</b>	Areas that are not evaluated or require additional evaluation.

## Overview of Major BRAC Installations

- 82 percent of total BRAC acres to be transferred or already transferred from DoD satisfies CERCLA environmental conditions for transfer.
  - 92 percent of the acres in BRAC Rounds I and IV
  - Almost 90 percent of Navy acres transferring out of DoD.
- The amount of acreage requiring further information decreased by 24 percent from FY98 to FY99, indicating the continuing progress of the cleanup program.
  - Only 25,931 acres (6.7 percent) of the 389,741 leaving DoD remain in category 7.

Properties falling into environmental condition of property categories 1 through 4 can be transferred according to CERCLA authority. Categories 1 through 4 encompass property that has never been contaminated, property that does not need remediation, and property where any necessary removal or remedial actions have been taken. Other encumbrances beyond CERCLA, such as wetlands or historic preservation issues, are not considered a legal impediment to property transfer.

Acreage in environmental condition of property categories 5 through 7 has ongoing environmental restoration activities, or further information is still required. As sites move through investigation and remediation, and environmental issues concerning acreage are addressed and resolved, property progresses from categories 5 through 7 (cleanup not completed/additional evaluation required) to categories 2 through 4 (suitable for transfer, does not require remediation, or necessary actions have been taken). While property is generally not available for transfer until it reaches categories 2 through 4, it can be put into reuse under a lease or can be transferred by deed with regulatory approval through use of the Early Transfer Authority. These two mechanisms are intended to facilitate the goals of the fast-track cleanup initiative by ensuring that property is available for community reuse as soon as possible. Early Transfer Authority is covered in greater detail in the Transfer and Reuse section of this document.

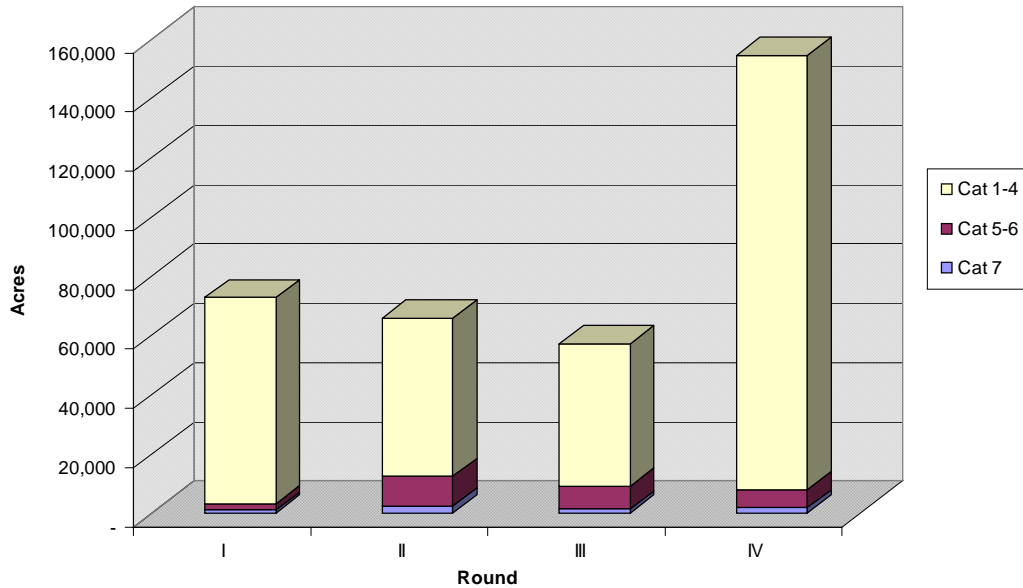
An important goal for environmental restoration at BRAC installations is for all acres to meet CERCLA requirements for transfer—that is, to achieve category 1 through 4 designations—by the end of FY05. Currently, 82 percent of the BRAC acres designated for transfer out of DoD (including property already transferred) is in categories 1 through 4. All of the ongoing and planned environmental restoration activities at BRAC installations are on the remaining 18 percent of property.

The BRAC 1988 and BRAC 1995 installations best illustrate the progress of BRAC environmental restoration efforts to make property suitable for transfer to non-military entities. Currently, more than 90 percent of BRAC 1988 acres are in categories 1 to 4, indicating that CERCLA requirements for transfer by deed have been met. The most recently designated BRAC installations, BRAC 1995 installations, have capitalized on program experience and lessons from earlier BRAC rounds. By the end of FY99, over 90 percent of BRAC 1995 acres also had met CERCLA requirements for transfer.

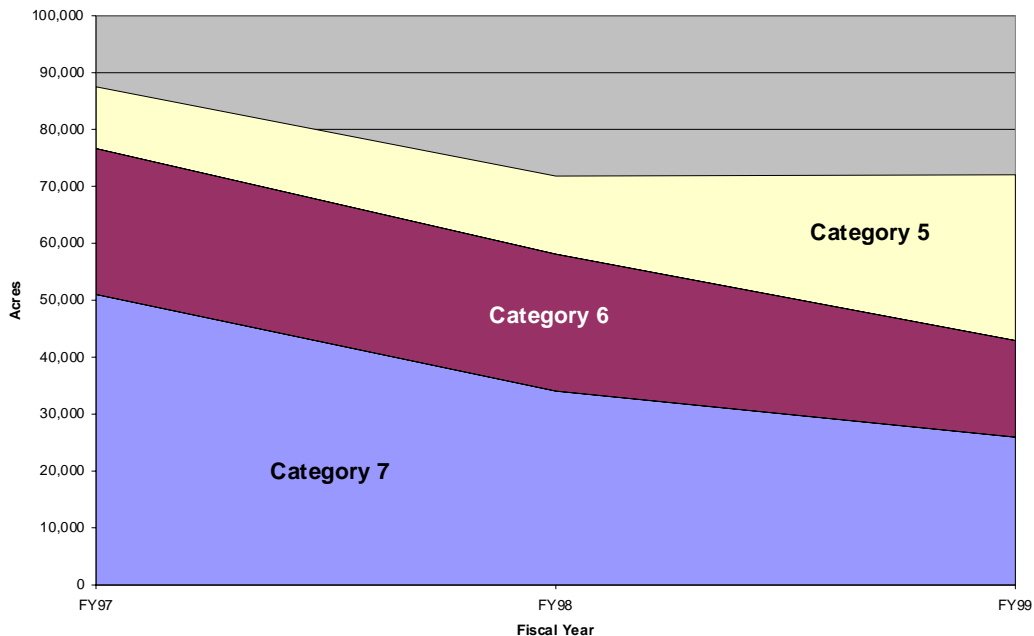
# Major BRAC Installations

Figure 11 shows the environmental condition of property status at the end of FY99 for the major BRAC installations by round. Over the past 3 years (Figure 12) the number of acres in category 7 has steadily decreased and, as expected, the number of acres in category 5 has increased. The number of acres in category 7 has

**Figure 11**  
**Environmental Condition of Property Categories for**  
**Fast-Track Acreage, by BRAC Round**



**Figure 12**  
**Change in Category 5, 6, and 7 Acreage from FY97 to FY99**



\*Fort Ord recategorized over 9,000 acres from category 4 in FY98 to category 5 in FY99 due to UXO issues.



also decreased faster than projected in both FY98 and FY99 and is now less than 7 percent of the total BRAC acreage to be transferred out of DoD. Table A4 (Appendix A) breaks down BRAC acreage by environmental condition of property categories.

## ENVIRONMENTAL ISSUES NOT ADDRESSED UNDER CERCLA

Although the CERCLA process governs most aspects of environmental cleanup at BRAC installations, there are other important environmental issues that can be of concern at some BRAC installations. Other environmental and safety issues can also affect property at BRAC installations such as the presence of petroleum products, unexploded ordnance (UXO), and consideration of natural and cultural resources.

### Non-CERCLA Issues at Major BRAC Installations

- UXO affects more than 36 percent of all acres to be transferred out of DoD
  - 90 percent of these acres are on 5 of the 112 major BRAC installations.
- Natural and cultural resource issues affect only 9 percent of acres transferring from DoD.
- Petroleum products affect less than 2 percent of acres to be transferred.

There are many cases in which a particular piece of land is affected by more than one of these issues. Such acreage is counted separately for each issue. As a result, the combined total acreage affected by petroleum products, UXO, and natural and cultural resources, as reflected in this analysis, is higher than the total number of acres affected by these non-CERCLA

environmental issues. Because CERCLA does not require these issues to be addressed before transfer, acreage may be classified as category 1 to 4 (that is, acreage that is suitable for transfer) when it still has petroleum products, UXO, or natural and cultural resources issues. Table A5 (Appendix A) summarizes non-CERCLA issues. Table A6 (Appendix A) compares acreage in categories 1 through 4 with acres available for transfer when non-CERCLA issues are considered.

### *UXO and the Range Rule*

Management of and response to unexploded munitions is a primary focus of DoD's efforts to ensure protection of human health, public safety, and the environment. In an effort to adequately address the issue of UXO at closed, transferred, and transferring ranges, DoD is

# Major BRAC Installations

drafting the Range Rule. When it is promulgated as a regulation, the Range Rule will address identification and removal of UXO at closed, transferred, and transferring ranges to ensure that explosives safety and environmental issues are properly considered. Planning for future use that is compatible with UXO ranges increases the success of property reuse and transfer.

## SUPPORTING REUSE AND TRANSFER

An objective of the BRAC process is to transfer property quickly and efficiently. Successful completion of the BRAC process allows avoidance of further costs, as well as beneficial reuse of property by the local community. Reuse and transfer issues are outside the purview of the Environmental Security Office, but the office supports reuse and transfer by providing the framework for expeditiously making the property environmentally suitable for transfer and by obtaining input from communities in making cleanup decisions.

### *Reuse Plans and the National Environmental Policy Act*

Once an installation has been selected for realignment and closure, the reuse process begins. Through this process, the community identifies local reuse needs and creates a reuse plan for the

Component to consider in the disposal of base property. Finalization of reuse plans is a critical step in identifying land use alternatives, which are considered in determining the appropriate remediation for a particular site. Finalizing reuse plans is also critical for determining the appropriate property disposal mechanism. At the end of FY99, reuse plans had been completed for 90 percent of the 101 installations requiring them. Figure 13 shows the percentage of required reuse plans that have been completed for each BRAC round. Table A7 (Appendix A) summarizes the status of reuse plans.

**Figure 13**  
**Status of Reuse Plans by BRAC Round**

Round	# Required	# Complete	% Complete
I	16	16	100.00
II	27	25	92.59
III	25	23	92.00
IV	33	27	81.82
Total	101	91	90.00

As part of the reuse planning process, the Component must comply with NEPA, which usually involves preparation of Environmental Impact Statements and issuance of a Record of Decision or

## Major BRAC Installations

preparation of Environmental Assessment statement and issuance of a finding of no significant impact. For the process of transferring BRAC property, compliance with NEPA is related to property disposal decisions, which are largely dependent on the reuse plan prepared by the redevelopment authority.

The *Base Reuse Implementation Manual* calls for the completion of the NEPA analysis no later than 12 months after the LRA adopts its

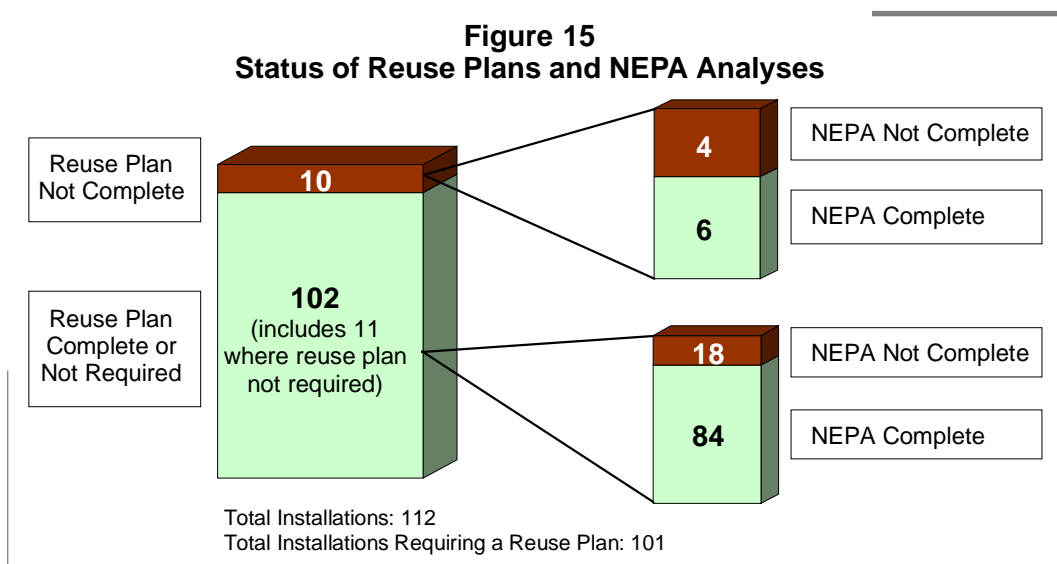
final reuse plan. Figure 14 shows that as of the end of FY99, 82 percent of BRAC installations had completed the required NEPA analysis. By the end of FY00, DoD expects to have NEPA analysis completed for 98 percent of BRAC installations. The NEPA requirements at the remaining two installations were deferred pending completion of ongoing chemical demilitarization obligations. These installations are projected for completion in FY03 and FY10.

**Figure 14**  
**Percentage of Installations with NEPA Complete by Round**

Round	NEPA Complete Through FY99	FY99 % NEPA Complete
I	17	89.47
II	25	89.29
III	22	75.86
IV	28	77.78
Total	92	82.14

Table A8 (Appendix A) details NEPA completion status through FY98 and FY99, and Table A9 (Appendix A) compares NEPA completion with reuse plan completion showing that only 46 percent of installations completed their NEPA analyses within 1 year of the adopted reuse plan. Figure 15 compares the continuing progress of reuse plan finalization and NEPA completion.

**Figure 15**  
**Status of Reuse Plans and NEPA Analyses**



# Major BRAC Installations

## *Finding of Suitability to Transfer and Finding of Suitability to Lease*

In order for property to be conveyed by deed or lease, the property must be certified as environmentally suitable for transfer or lease. To do so, the Component, with input and review from the U.S. EPA and the state regulatory agency, must prepare a Finding of Suitability to Transfer (FOST) or a Finding of Suitability to Lease (FOSL) for the property. The FOST/FOSL evaluation process, documented in the FOST/FOSL, is normally carried out by the BCT to determine whether property is environmentally suitable for its intended use and whether environmental restoration requirements have been met. The FOST/FOSL is the link between the environmental and the real estate processes and serves as the mechanism for conveying requirements to be included in the real estate transaction, such as any restrictions on the future use of the property.

While each FOST is an accomplishment, it is important to remember that it is the total number of acres transferred out of DoD that indicates the success of the BRAC process. Just as they must do to fulfill CERCLA requirements, BCTs must work together to complete FOSTs and FOSLs. Figure 16 shows the increase in the number of FOSTs and FOSLs and the associated acreage from FY97 through FY99. Table A10 (Appendix A) breaks out FOST/FOST transactions and acres completed, and Table A11 (Appendix A) compares FY99 projections and completions and shows total completions to date.

These tables show that in FY99, as in FY98, a smaller number of FOSTs and FOSLs were completed than was projected. There is no one reason for the difference in planned versus actual accomplishments, but general explanations include:

- Changes in reuse requirements or schedules
- Overly optimistic projections by BCTs
- Unexpected regulatory concerns
- Additional reuse requirements identified by other federal agencies
- Non-CERCLA issues.

### **FOSTs and FOSLs at Major BRAC Installations**

- By the end of FY99, installations had completed 370 FOSTs totaling 87,044 acres.
- In FY99, DoD completed 71 FOSTs and 56 FOSLs.
- For FY00, DoD anticipates completing 366 FOSTs, representing 79,543 acres, and 46 FOSLs, representing 5,425 acres.

**Figure 16**  
**FY97, FY98, and FY99 FOSTs and FOSLs\***

	Completed by FY97	Completed by FY98	Completed by FY99
# FOSTs	232	299	370
FOST Acres	43,480	71,185	87,044
# FOSLs	1,367	1,472	1,528
FOSL Acres	68,631	79,271	84,545

\*NOTE: Numbers are cumulative

### *Transferring BRAC Property*

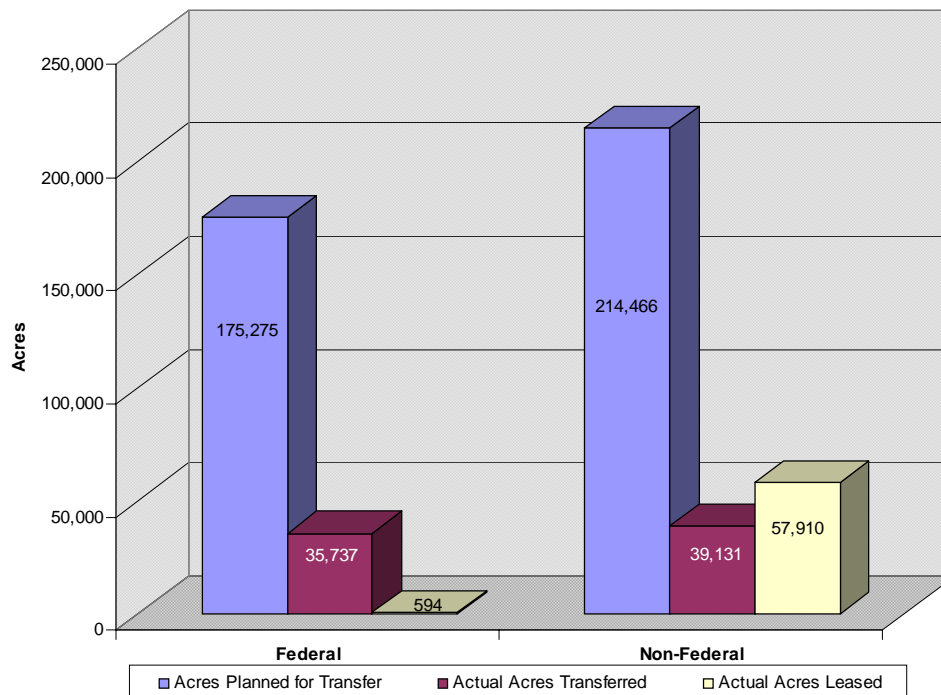
Property transfer is an important objective of the BRAC process. At the end of FY99, 82 percent of the total BRAC program acreage was environmentally suitable for transfer under CERCLA. This includes property already transferred out of DoD (19 percent) and property planned for transfer. According to the FY99 BCP abstracts, only 19 percent of the acres slated for transfer at these 112 major installations has been transferred. This percentage, however, does not demonstrate the actual accomplishments of the BRAC process. Almost half of the acreage (42 percent) of the first three BRAC rounds has already been transferred. Table A12 (Appendix A) breaks down the actual acres leased and transferred and Table A13 (Appendix A) compares the total acres leased and transferred in FY98 with the total acres leased and transferred in FY99.

There are many reasons why the balance of the environmentally suitable acreage has not yet been transferred. For instance, there may not be an immediate demand for reuse of the property due to changes in reuse requirements, lack of financing for development, the presence of land use controls, or the need to make infrastructure improvements. In other cases, mutually satisfactory agreements for dealing with such issues as petroleum products, UXO, or natural and cultural resources—which do not preclude deed transfer—have not yet been reached between the Component and the prospective transferee. Also, once BRAC property has been cleaned up to a suitable level and is available for transfer, the real estate market, which is out of DoD's control, drives the transfer process to a great extent. A third factor might be that the required NEPA analysis has not been completed, therefore the LRA or other federal agency cannot receive the property. If installations that have not completed NEPA analysis are excluded, the total percentage of acres transferred or leased increases from 19 percent to 45 percent.

As shown in Figure 17, 45 percent of the acres to be transferred from DoD is planned for transfer to other federal agencies. Of this 175,275 acres, over half (almost 88,000 acres) is at Adak and Fort Ord. The majority of BRAC acres available for transfer from DoD is intended for transfer to non-federal entities. Of this property, about 39,000 acres (18 percent) has already been transferred, with another 58,000 (27 percent) in reuse through lease.

# Major BRAC Installations

**Figure 17**  
**Comparison of Acres Planned for Federal and Non-Federal Transfer**  
**and Acres Actually Transferred and Leased**



There are two immediate alternatives for reuse of property while remedial activities are under way: leasing or early transfer. A long-term lease is one way for an LRA or a federal agency to have use of the property while DoD continues environmental remediation. While leasing is an effective means of making property available for community reuse as soon as possible, DoD would prefer that property be transferred by deed. The data show that over the past 2 years, DoD has been transferring more property by deed rather than leasing property (see Table A13, Appendix A).

Early Transfer Authority gives installations the option of transferring the property by deed while environmental restoration work is in progress. Properties transferred under the Early Transfer Authority may require land use controls or restrictions, but the early transfer allows the property recipient, often the LRA, to achieve reuse for the community earlier than would otherwise be possible. Grissom Air Force Base completed the first early transfer in FY97, and 5 more early transfers were completed through FY99. Of significant note is the large transfer of acreage at Tooele Army Depot in Utah. The Finding of Suitability for Early Transfer for this property was signed in FY98, and the site was transferred in December 1998 (FY99). The transfer represents a major achievement for the BRAC program, since Tooele is an NPL installation. More early transfers were initiated in FY99 and will be completed in FY00.

## Property Transfers at Major BRAC Installations

- Over 34 percent (133,372 acres) of the total acres leaving DoD has been transferred or leased.
  - 15 percent (58,504 acres) has been leased
  - 19 percent (74,868 acres) has been transferred.
- DoD has transferred almost 38 percent more acres in FY99 than in FY98 and leased almost 26 percent fewer acres in FY99 than in FY98.



**WorldWideWeb**

**Most documents listed here  
are available on the BRAC  
Web site:**

[http://www.dtic.mil/envirodod/  
brac](http://www.dtic.mil/envirodod/brac)

As part of the Office of the Deputy Under Secretary of Defense for Environmental Security, DoD's Office of Environmental Cleanup is charged with developing policy and overseeing the Defense Environmental Restoration Program. This program focuses on reducing the risks to human health and the environment while ensuring that DoD environmental cleanup policy conforms to existing laws and regulations. The following section describes policy, guidance, and initiatives developed during FY99 and FY00.

During FY99, DoD developed policy, guidance, and initiatives to help expedite environmental cleanup and support property transfer. Information on these efforts is provided below.

### ***BRAC Cleanup Plans***

New document: *Updating the BRAC Cleanup Plan: A Living Tool for Integrating Reuse and Cleanup*, BRAC Environmental Fact Sheet, spring 1999. This fact sheet helps BCTs update their BCPs so that these plans can remain living documents for managing environmental restoration efforts. The fact sheet identifies:

- Specific sections that should be updated every 9 to 18 months
- Tools for coordinating and exchanging information with the LRA
- The BTC's role as facilitator and coordinator.

### ***UXO***

New document: *Unexploded Ordnance (UXO)*, BRAC Environmental Fact Sheet, spring 1999. This fact sheet provides an overview of the UXO clearance and process requirements.

### ***Land Use Controls***

DoD is developing guidance documents to provide a uniform DoD framework for implementing, recording and annotating, and managing land use controls for both surplus real property being transferred out of federal control and active installations.

# Policy, Guidance, and Initiatives

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## ***Lead-Based Paint Field Guide***

To achieve consistency in the application of the lead-based paint requirements while expediting the availability of property and eliminating possible delays in property transfers, in December 1999, DoD and U.S. EPA issued a joint interim field guide for use by DoD and U.S. EPA personnel in evaluating and controlling lead-based paint at DoD residential real property scheduled for disposal under the BRAC program. Lead-based paint requirements are defined by Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and its implementing regulations. The field guide provides a road map summarizing the Act's requirements for evaluation and control of lead-based paint hazards in target housing.

## ***Voluntary Cleanup Agreements***

DoD is pursuing voluntary cleanup agreements with state regulatory agencies to encourage partnering, improve relations with regulators, and complete environmental restoration. DoD seeks to participate in state cleanup programs that private parties have used for several years to streamline and expedite the cleanup process. A voluntary cleanup agreement will be tailored to a state's individual programs, needs, and cleanup issues. Each comprehensive agreement may involve joint planning, use of innovative technology, and sharing of resources to streamline the state-federal relationship and eliminate the potential for uncoordinated activities. DoD has completed an agreement with Pennsylvania, but it does not apply to BRAC. DoD is pursuing negotiations with New Jersey and other states.

## ***BCT Workshop Video***

DoD-sponsored BCT workshops were held throughout the country in FY98. These workshops provided information on the BRAC process and facilitated discussion among BCT members and regional and headquarters representatives from DoD and U.S. EPA. Building on that successful effort, DoD produced BCT workshop videos in November 1999 to share the insightful presentations and lessons learned with those new to the BRAC program or to serve as a refresher for people that have been working in the program.



In FY00, DoD will continue to develop and implement policy, guidance, and initiatives to facilitate and expedite the environmental restoration program. Some of the efforts described below began in FY99 and are targeted for completion in FY00; others are still in the planning stage.

### ***Cleanup Program Review***

The DoD Environmental Cleanup Office began a review in early FY00 to identify ways of improving installation cleanup performance, identify issues that continue to impede cleanup progress, develop recommendations to address these issues, and identify best management practices in the program. The primary focus of the review was to hear individual installation's and properties recipes for success to determine what is working, what is not, and where program improvements are needed. The review involved 16 BRAC and active installations from all Components. A best practices report detailing lessons learned in overcoming unique challenges and programmatic impediments will be shared across DoD's cleanup program.

### ***LRA and BCT Coordination***

New document: *Charting the Course to Cleanup and Reuse: Successful Examples of LRA and BCT Coordination*, BRAC Brochure. This brochure highlights lessons learned and describes particular BCTs' and LRAs' accomplishments and the tools used to better integrate and carry out cleanup, redevelopment, and real property transfer.

# Policy, Guidance, and Initiatives

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## LEVERAGING PRIVATE RESOURCES

To make the most of its resources and effectively manage its risk in BRAC environmental restoration and redevelopment efforts, DoD is looking at tools that have long been in use in the private sector.

### ***Firm-Fixed Price Task Order Contracts***

This contracting mechanism is used for tasks in which the scope of work is well defined (i.e., digging and hauling contaminated soil or installing a landfill cap). Contractors on these types of contracts are responsible for performing the work outlined in the statement of work (SOW) at the bid price, regardless of the length of time or resources used. Several installations, including the U.S. Army Reserve Center in Rio Vista are successfully using this mechanism. Using firm-fixed price task order contracting, Rio Vista has paid a set price for specific remedial actions to result in a cleaned up site. Rio Vista awarded the contract in November 1999 and is projecting site closeout by September 2001. The Army is also in the process of awarding a second fixed-price, guaranteed cleanup contract for Camp Pedricktown. That site would be scheduled for cleanup completion in March 2002.

### ***Environmental Insurance Fact Sheet***

This fact sheet provides information on environmental insurance as a risk management tool for reuse or redevelopment activities at BRAC installations.

The BRAC process has come a long way since the first BRAC round in 1988 and the initiation of fast-track cleanup in 1993. DoD has worked to establish a strong fast-track cleanup policy framework that allows for flexible, site-specific implementation at each installation. Continued efforts with U.S. EPA and state regulatory agencies in support of fast-track cleanup is essential to the continued success of the program.

The data and this analysis show that the fast-track cleanup initiative has made a difference. Each phase of the BRAC process proceeds more quickly under fast-track, allowing property to be available for transfer as soon as possible. Eighty-two percent of BRAC acres is available for transfer under CERCLA. Environmental restoration requirements have been completed at 54 percent of sites, with most of the remaining sites on track to be cleaned up by FY05 and all investigations planned for completion by FY03.

Since the cleanup and transfer processes are interdependent, continued close cooperation among DoD cleanup and real estate personnel, federal and state regulators, and communities is essential to integrating reuse with cleanup. Partnerships have played an important role in the BRAC process thus far and will continue to be vital to future successes.

## **FY99 BCP ABSTRACT ANALYSIS**

This and other documents on the BRAC Environmental Program are available at: <http://www.dtic.mil/envirodod/brac/>

We welcome and invite your comments on this analysis, as we seek ways to improve the information provided.  
Please send comments to the following address:

**OADUSD (Environmental Cleanup)**

Attn: Fast-Track Cleanup  
3400 Defense Pentagon  
Washington, DC 20301-3400



# **Appendix A**

## **BCP Data Summary**

# Appendix A

**Table A1**  
**Installations Included in the FY99 BCP Abstracts**

	Army	Navy	Air Force	DLA	Total
<b>Round I</b>	ARL - WATERTOWN CAMERON STATION FORT MEADE FORT SHERIDAN FORT WINGATE HAMILTON AAF JEFFERSON PG LEXINGTON PRESIDIO SF PUEBLO UMATILLA	BROOKLYN PHILADELPHIA NH SALTON SEA	CHANUTE GEORGE MATHER NORTON PEASE		<b>19</b>
<b>Round II</b>	ARL-WOODBRIDGE FORT B. HARRISON FORT DEVENS FORT ORD SACRAMENTO AD	CHASE FIELD DAVISVILLE HUNTERS PT LONG BEACH NS MOFFETT NAS PHILADELPHIA NS SAND POINT TUSTIN WARMINSTER NAWC	BERGSTROM CARSWELL CASTLE EAKER ENGLAND GRIFFISS GRISSOM LORING LOWRY MYRTLE BEACH RICHARDS-GEBAUR RICKENBACKER WILLIAMS WURTSMITH		<b>28</b>
<b>Round III</b>	FORT MONMOUTH TOOELE ARMY DEPOT VINT HILL FARMS	AGANA ALAMEDA BARBERS POINT CECIL FIELD CHARLESTON NC DALLAS DRIVER EL TORO GLENVIEW MARE ISLAND MEMPHIS MIDWAY OAKLAND NH ORLANDO NTC SAN DIEGO NTC SAN FRANCISCO STATEN ISLAND TREASURE ISLAND TRENTON NAWC	GENTILE AFS HOMESTEAD K.I. SAWYER MARCH NEWARK PLATTSBURGH	DSC PHILADELPHIA *	<b>29</b>
<b>Round IV</b>	BAYONNE CAMP BONNEVILLE DETROIT FITZSIMONS FORT CHAFFEE FORT DIX FORT GREELY FORT MCCLELLAN FORT PICKETT FORT RITCHIE FORT TOTTEN HINGHAM LETTERKENNY OAKLAND RED RIVER SAVANNA SENECA AD SIERRA STRATFORD AEP SUDBURY	ADAK GUAM INDIANAPOLIS LONG BEACH LOUISVILLE NEW LONDON OAKLAND FISC POINT MOLATE SOUTH WEYMOUTH WHITE OAK	KELLY AFB MCCLELLAN REESE ROSLYN	DDOU OGDEN DDMT MEMPHIS	<b>36</b>
<b>Total</b>	<b>39</b>	<b>41</b>	<b>29</b>	<b>3</b>	<b>112</b>

\*Gentile AFS has been reclassified as Air Force instead of DLA

**Table A2**  
**Installations on the NPL**

	Round I	Round II	Round III	Round IV	Total
<b>Army</b>	Fort Meade* Umatilla Watertown ARL	Fort Devens Fort Ord Sacramento	Tooele	Letterkenny Savanna Seneca Sudbury Annex	<b>11</b>
<b>Navy</b>		Davisville Hunters Point Moffett Warminster	Cecil Field NAS El Toro MCAS	Adak South Weymouth	<b>8</b>
<b>Air Force</b>	George AFB Mather AFB Norton AFB Pease AFB	Castle AFB Griffiss AFB Loring AFB Rickenbacker AFB* Williams AFB Wurtsmith AFB*	Homestead AFB March AFB Plattsburgh AFB	McClellan AFB	<b>14</b>
<b>DLA</b>				Memphis Ogden	<b>2</b>
<b>Total</b>	<b>7</b>	<b>13</b>	<b>6</b>	<b>9</b>	<b>35</b>

\* proposed

# Appendix A

**Table A3**  
**Progress Made in Updating BCPs**

	Number of Plans Updated	Number of Plans Updated in FY99	% of Plans Updated	Average Age of Plan in Months (as of 10/99)
<b>Army</b> (39 Installations)	27	6	69.23%	31
Round I (11 Installations)	11	1	100.00%	40
Round II (5 Installations)	5	1	100.00%	34
Round III (3 Installations)	3	1	100.00%	33
Round IV (20 Installations)	8	3	40.00%	25
<b>Navy</b> (41 Installations)	34	5	82.93%	28
Round I (3 Installations)	3	1	100.00%	24
Round II (9 Installations)	9	0	100.00%	31
Round III (19 Installations)	17	3	89.47%	26
Round IV (10 Installations)	5	1	50.00%	25
<b>Air Force</b> (29 Installations)	22	0	75.86%	34
Round I (5 Installations)	5	1	100.00%	32
Round II (14 Installations)	11	0	78.57%	44
Round III (6 Installations)	5	2	83.33%	24
Round IV (4 Installations)	1	1	25.00%	20
<b>DLA</b> (3 Installations)	3	2	100.00%	8
Round I (0 Installations)	--	--	--	--
Round II (0 Installations)	--	--	--	--
Round III (1 Installations)	1	1	100.00%	11
Round IV (2 Installations)	2	1	100.00%	7
<b>Service Totals</b>	86	13	76.79%	30
Round I (19 Installations)	19	3	100.00%	35
Round II (28 Installations)	25	1	89.29%	38
Round III (29 Installations)	26	7	89.66%	25
Round IV (36 Installations)	16	6	44.44%	23



**Table A4. Status of FY99 Environmental Condition of Property Categories and Percent Change from FY98**

	Total Installation Acres	Acres to Transfer Out of DoD	FY98 Category 1- 4	FY99 Category 1-4	% FY98- FY99	% of Acres to be Transferred	FY98 Cat 5-6	FY99 Cat 5-6	% FY98- FY99	FY98 Cat 7	FY99 Cat 7	% FY98- FY99
<b>Army</b>	1,140,533	143,882	115,490	107,940	-6.54%	75.02%	15,394	22,613	46.89%	12,829	13,328	3.89%
Round I	137,562	37,547	33,721	35,078	4.02%	93.42%	1,795	1,683	-6.24%	821	786	-4.26%
Round II	40,612	34,325	18,779	9,170	-51.17%	26.72%	10,520	17,835	69.53%	5,714	7,320	28.11%
Round III	26,155	2,573	1,145	1,264	10.39%	49.13%	87	10	-88.51%	1,384	1,299	-6.14%
Round IV	936,204	69,437	61,845	62,428	0.94%	89.91%	2,992	3,085	3.11%	4,910	3,923	-20.10%
<b>Navy</b>	180,355	158,697	142,840	141,700	-0.80%	89.29%	8,750	9,273	5.98%	11,459	7,726	-32.58%
Round I	19,493	19,493	19,479	19,483	0.02%	99.95%	0	0	0.00%	0	10	100.00%
Round II	13,835	12,965	10,851	10,490	-3.33%	80.91%	2,365	1,929	-18.44%	634	547	-13.72%
Round III	63,518	45,759	35,401	33,867	-4.33%	74.01%	6,215	5,721	-7.95%	6,806	6,171	-9.33%
Round IV	83,509	80,480	77,109	77,860	0.97%	96.74%	170	1,623	854.71%	4,019	998	-75.17%
<b>Air Force</b>	95,496	85,348	60,935	66,781	9.59%	78.25%	13,545	14,102	4.11%	9,290	4,465	-51.94%
Round I	19,503	19,190	14,951	14,922	-0.19%	77.76%	2,800	2,780	-0.71%	1,366	1,488	8.93%
Round II	46,892	42,606	30,032	33,860	12.75%	79.47%	5,330	6,626	24.32%	5,702	2,121	-62.80%
Round III	18,379	15,225	12,373	12,984	4.94%	85.28%	2,791	2,105	-24.58%	60	135	125.00%
Round IV	10,722	8,327	3,579	5,015	40.12%	60.23%	2,624	2,591	-1.26%	2,162	721	-66.65%
<b>DLA</b>	1,858	1,814	1,294	1,277	-1.31%	70.40%	125	126	0.80%	439	412	-6.15%
Round I	--	--	--	--	--	--	--	--	--	--	--	--
Round II	--	--	--	--	--	--	--	--	--	--	--	--
Round III	87	87	77	87	12.99%	100.00%	0	0	0.00%	10	0	-100.00%
Round IV	1,771	1,727	1,217	1,190	-2.22%	68.91%	125	126	0.80%	429	412	-3.96%
<b>Service Totals</b>	1,418,242	389,741	320,559	317,698	-0.89%	81.52%	37,814	46,114	21.95%	34,017	25,931	-23.77%
Round I	176,558	76,230	68,151	69,483	1.95%	91.15%	4,595	4,463	-2.87%	2,187	2,284	4.44%
Round II	101,339	89,896	59,662	53,520	-10.29%	59.54%	18,215	26,390	44.88%	12,050	9,988	-17.11%
Round III	108,139	63,644	48,996	48,202	-1.62%	75.74%	9,093	7,836	-13.82%	8,260	7,605	-7.93%
Round IV	1,032,206	159,971	143,750	146,493	1.91%	91.57%	5,910	7,425	25.63%	11,520	6,054	-47.45%

# Appendix A

**Table A5**  
**Acres Affected by Non-CERCLA Issues**

	Total Installation Acres	Acres to Transfer Out of DoD	POL	% POL Affected	UXO	% UXO Affected	NCR	% NCR Affected
<b>Army</b>	1,140,533	143,882	509	0.35%	68,547	47.64%	12,389	8.61%
Round I	137,562	37,547	41	0.11%	11,231	29.91%	890	2.37%
Round II	40,612	34,325	90	0.26%	25,318	73.76%	1,811	5.28%
Round III	26,155	2,573	35	1.36%	0	0.00%	30	1.17%
Round IV	936,204	69,437	343	0.49%	31,998	46.08%	9,658	13.91%
<b>Navy</b>	180,355	158,697	2,391	1.51%	73,122	46.08%	10,876	6.85%
Round I	19,493	19,493	4	0.02%	1,113	5.71%	3,504	17.98%
Round II	13,835	12,965	118	0.91%	0	0.00%	28	0.22%
Round III	63,518	45,759	829	1.81%	1,009	2.21%	6,050	13.22%
Round IV	83,509	80,480	1,440	1.79%	71,000	88.22%	1,294	1.61%
<b>Air Force</b>	95,496	85,348	3,689	4.32%	360	0.42%	10,738	12.58%
Round I	19,503	19,190	946	4.93%	29	0.15%	5,612	29.24%
Round II	46,892	42,606	2,223	5.22%	307	0.72%	2,567	6.02%
Round III	18,379	15,225	519	3.41%	24	0.16%	1,903	12.50%
Round IV	10,722	8,327	1	0.01%	0	0.00%	656	7.88%
<b>DLA</b>	1,858	1,814	63	3.47%	8	0.44%	143	7.88%
Round I	--	--	--	--	--	--	--	--
Round II	--	--	--	--	--	--	--	--
Round III	87	87	55	63.22%	0	0.00%	87	100.00%
Round IV	1,771	1,727	8	0.46%	8	0.46%	56	3.24%
<b>Service Totals</b>	1,418,242	389,741	6,652	1.71%	142,037	36.44%	34,146	8.76%
Round I	176,558	76,230	991	1.30%	12,373	16.23%	10,006	13.13%
Round II	101,339	89,896	2,431	2.70%	25,625	28.51%	4,406	4.90%
Round III	108,139	63,644	1,438	2.26%	1,033	1.62%	8,070	12.68%
Round IV	1,032,206	159,971	1,792	1.12%	103,006	64.39%	11,664	7.29%

\*The combined total of acres affected by POL, UXO, and NCR is higher than the total acres affected by these non-CERCLA environmental issues because acreage affected by these various problems may overlap.

**Table A6**  
**Comparison of Category 1 to 4 Acres and Acres Available for**  
**Transfer Taking Non-CERCLA Issues into Account**

	Total Installation Acres	Acres to Transfer Out of DoD	FY99 Categories 1-4	Acres Available for Transfer*	% of Acres to Transfer Out of DoD
<b>Army</b>	1,140,533	143,882	107,940	107,481	74.70%
Round I	137,562	37,547	35,078	35,078	93.42%
Round II	40,612	34,325	9,170	9,170	26.72%
Round III	26,155	2,573	1,264	1,254	48.74%
Round IV	936,204	69,437	62,428	61,979	89.26%
<b>Navy</b>	180,355	158,697	141,700	141,637	89.25%
Round I	19,493	19,493	19,483	19,483	99.95%
Round II	13,835	12,965	10,490	10,490	80.91%
Round III	63,518	45,759	33,867	33,804	73.87%
Round IV	83,509	80,480	77,860	77,860	96.74%
<b>Air Force</b>	95,496	85,348	66,781	63,737	74.68%
Round I	19,503	19,190	14,922	14,117	73.56%
Round II	46,892	42,606	33,860	31,642	74.27%
Round III	18,379	15,225	12,984	12,964	85.15%
Round IV	10,722	8,327	5,015	5,014	60.21%
<b>DLA</b>	1,858	1,814	1,277	1217	67.09%
Round I	--	--	--	--	--
Round II	--	--	--	--	--
Round III	87	87	87	87	100.00%
Round IV	1,771	1,727	1,190	1130	65.43%
<b>Service Totals</b>	1,418,242	389,741	317,698	314,072	80.58%
Round I	176,558	76,230	69,483	68,678	90.09%
Round II	101,339	89,896	53,520	51,302	57.07%
Round III	108,139	63,644	48,202	48,109	75.59%
Round IV	1,032,206	159,971	146,493	145,983	91.26%

\*While category 1 to 4 acres are transferrable under CERCLA, the number of acres available for transfer is based on the BCTs judgment that there may be non-CERCLA environmental issues that might be addressed in property transfer.

# Appendix A

**Table A7**  
**Status of Reuse Plans**

	Not Needed	No Interest	Drafting Plan	Plan Drafted	LRA	HUD	Data not Available	Complete	% Complete
<b>Army</b> <b>(39 Installations)</b>	4	0	1	1	26	7	0	33	94.29%
Round I (11 Installations)	2	0	0	0	9	0	0	9	100.00%
Round II (5 Installations)	1	0	0	0	4	0	0	4	100.00%
Round III (3 Installations)	0	0	0	0	2	1	0	3	100.00%
Round IV (20 Installations)	1	0	1	1	11	6	0	17	89.47%
<b>Navy</b> <b>(41 Installations)</b>	4	0	3	1	27	6	0	33	89.19%
Round I (3 Installations)	0	0	0	0	3	0	0	3	100.00%
Round II (9 Installations)	0	0	1	0	6	2	0	8	88.89%
Round III (19 Installations)	3	0	1	0	12	3	0	15	93.75%
Round IV (10 Installations)	1	0	1	1	6	1	0	7	77.78%
<b>Air Force</b> <b>(29 Installations)</b>	1	0	0	2	22	3	1	25	89.29%
Round I (5 Installations)	1	0	0	0	4	0	0	4	100.00%
Round II (14 Installations)	0	0	0	1	12	1	0	13	92.86%
Round III (6 Installations)	0	0	0	1	3	2	0	5	83.33%
Round IV (4 Installations)	0	0	0	0	3	0	1	3	75.00%
<b>DLA</b> <b>(3 Installations)</b>	2	0	0	0	0	0	1	0	0.00%
Round I (0 Installations)	--	--	--	--	--	--	--	--	--
Round II (0 Installations)	--	--	--	--	--	--	--	--	--
Round III (1 Installations)	1	0	0	0	0	0	0	0	0.00%
Round IV (2 Installations)	1	0	0	0	0	0	1	0	0.00%
<b>Service Totals</b>	11	0	4	4	75	16	2	91	90.10%
Round I (19 Installations)	3	0	0	0	16	0	0	16	100.00%
Round II (28 Installations)	1	0	1	1	22	3	0	25	92.59%
Round III (29 Installations)	4	0	1	1	17	6	0	23	92.00%
Round IV (36 Installations)	3	0	2	2	20	7	2	27	81.82%

Note: The percentage of total complete includes only reuse plans that are required.

**Table A8**  
**NEPA Completion**

	NEPA Complete Through FY98	FY98 % NEPA Complete	NEPA Complete Through FY99	FY99 % NEPA Complete
<b>Army</b> <b>(39 Installations)</b>	<b>30</b>	<b>76.92%</b>	<b>35</b>	<b>89.74%</b>
Round I (11 Installations)*	9	81.82%	9	81.82%
Round II (5 Installations)	5	100.00%	5	100.00%
Round III (3 Installations)	3	100.00%	3	100.00%
Round IV (20 Installations)	13	65.00%	18	90.00%
<b>Navy</b> <b>(41 Installations)</b>	<b>21</b>	<b>51.22%</b>	<b>23</b>	<b>56.10%</b>
Round I (3 Installations)	2	66.67%	2	66.67%
Round II (9 Installations)**	6	66.67%	6	66.67%
Round III (19 Installations)	8	42.11%	12	63.16%
Round IV (10 Installations)	3	30.00%	3	30.00%
<b>Air Force</b> <b>(29 Installations)</b>	<b>29</b>	<b>100.00%</b>	<b>29</b>	<b>100.00%</b>
Round I (5 Installations)	5	100.00%	5	100.00%
Round II (14 Installations)	14	100.00%	14	100.00%
Round III (6 Installations)	6	100.00%	6	100.00%
Round IV (4 Installations)	4	100.00%	4	100.00%
<b>DLA</b> <b>(3 Installations)</b>	<b>3</b>	<b>100.00%</b>	<b>3</b>	<b>100.00%</b>
Round I (0 Installations)	--		--	
Round II (0 Installations)	--		--	
Round III (1 Installations)	1	100.00%	1	100.00%
Round IV (2 Installations)	2	100.00%	2	100.00%
<b>Service Totals</b>	<b>83</b>	<b>74.11%</b>	<b>90</b>	<b>80.36%</b>
Round I (19 Installations)	16	84.21%	16	84.21%
Round II (28 Installations)	25	89.29%	25	89.29%
Round III (29 Installations)	18	62.07%	22	75.86%
Round IV (36 Installations)	24	66.67%	27	75.00%

\* The two NEPA documents not completed at Army BRAC I installations are for Pueblo and Umatilla. These documents were delayed by the chemical demilitarization missions at these installations and will not be prepared until the missions are completed.

\*\* These are not the same facilities. In FY99, Warminster completed its EIS. For FY98, Moffett Field had completed its EA; in FY99, its EIS is as yet incomplete.

# Appendix A

**Table A9**  
**NEPA Completion in Relation to Reuse Plan Completion**

	NEPA Complete Pre-Reuse Plan	NEPA Complete within 1 Year	NEPA Complete within 2 Years	NEPA Complete over 2 Years	Installation Not Counted
<b>Army</b> (39 Installations)	5	16	6	4	8
Round I (11 Installations)	3	1	0	3	4
Round II (5 Installations)	0	3	0	1	1
Round III (3 Installations)	0	1	2	0	0
Round IV (20 Installations)	2	11	4	0	3
<b>Navy</b> (41 Installations)	1	6	4	7	23
Round I (3 Installations)	0	2	0	0	1
Round II (9 Installations)	1	1	0	3	4
Round III (19 Installations)	0	2	2	4	11
Round IV (10 Installations)	0	1	2	0	7
<b>Air Force</b> (29 Installations)	8	15	4	2	0
Round I (5 Installations)	2	2	0	1	0
Round II (14 Installations)	5	6	3	0	0
Round III (6 Installations)	1	4	0	1	0
Round IV (4 Installations)	0	3	1	0	0
<b>DLA</b> (3 Installations)	0	1	1	0	1
Round I (0 Installations)	--	--	--	--	--
Round II (0 Installations)	--	--	--	--	--
Round III (1 Installations)	0	1	0	0	0
Round IV (2 Installations)	0	0	1	0	1
<b>Service Totals</b>	14	38	15	13	32
Round I (19 Installations)	5	5	0	4	5
Round II (28 Installations)	6	10	3	4	5
Round III (29 Installations)	1	8	4	5	11
Round IV (36 Installations)	2	15	8	0	11

**Table A10. FOST/FOSL Transactions and Acreage Completed (through FY99) and Anticipated (FY00)**

	Acres to transfer out of DoD	FOSTs Completed	FOST Acres Completed	Percentage Acres to be Transferred	FOSLs Completed	FOSL Acres Completed	FOSTs Anticipated	FOST Acres Anticipated	FOSLs Anticipated	FOSL Acres Anticipated
<b>Army</b>	143,882	119	27,893	19.39%	71	12,224	35	25,495	6	1,742
Round I	37,547	18	10,208	27.19%	10	4,494	9	7,824	1	0
Round II	34,325	76	14,583	42.49%	11	1,934	10	10,644	0	0
Round III	2,573	2	709	27.56%	13	2,291	3	208	0	0
Round IV	69,437	23	2,393	3.45%	37	3,505	13	6,819	5	1,742
<b>Navy</b>	158,697	83	36,860	23.23%	1,057	18,974	226	27,175	12	147
Round I	19,493	4	19,454	99.80%	1	6	1	29	0	0
Round II	12,965	22	3,848	29.68%	53	4,834	17	3,505	7	19
Round III	45,759	52	12,703	27.76%	980	9,201	180	20,215	4	124
Round IV	80,480	5	855	1.06%	23	4,933	28	3,426	1	4
<b>Air Force</b>	85,348	166	21,746	25.48%	389	51,674	102	26,663	27	3,536
Round I	19,190	58	4,117	21.45%	44	16,278	14	2,761	0	0
Round II	42,606	92	16,884	39.63%	170	26,428	54	12,045	5	344
Round III	15,225	16	745	4.89%	134	6,970	32	9,381	6	777
Round IV	8,327	0	0	0.00%	41	1,998	2	2,476	16	2,415
<b>DLA</b>	1,814	2	545	30.04%	11	1,673	3	210	1	0
Round I	--	--	--	--	--	--	--	--	--	--
Round II	--	--	--	--	--	--	--	--	--	--
Round III	87	0	0	0.00%	1	10	1	0	0	0
Round IV	1,727	2	545	31.56%	10	1,663	2	210	1	0
<b>Service Totals</b>	389,741	370	87,044	22.33%	1,528	84,545	366	79,543	46	5,425
Round I	76,230	80	33,779	44.31%	55	20,778	24	10,614	1	0
Round II	89,896	190	35,315	39.28%	234	33,196	81	26,194	12	363
Round III	63,644	70	14,157	22.24%	1,128	18,472	216	29,804	10	901
Round IV	159,971	30	3,793	2.37%	111	12,099	45	12,931	23	4,161

**Table A11. FOST/FOSL FY98 Projections and Completions and FY99 Completions**

	<b>FOST Complete by FY98</b>	<b>FOST Complete in FY99</b>	<b>FOST Projected for FY99</b>	<b>% FOST Projected Complete</b>	<b>FOST Complete by FY99</b>	<b>FOSL Complete by FY98</b>	<b>FOSL Complete in FY99</b>	<b>FOSL Projected for FY99</b>	<b>% FOSL Projected Complete</b>	<b>FOSL Complete by FY99</b>
<b>Army</b>	101	18	59	30.51%	119	58	13	18	72.22%	71
<b>Navy</b>	60	23	212	10.85%	83	1,045	12	43	27.91%	1057
<b>Air Force</b>	138	28	92	30.43%	166	360	29	57	50.88%	389
<b>DLA</b>	0	2	4	50.00%	2	9	2	2	100.00%	11
<b>Totals</b>	299	71	367	19.35%	370	1,472	56	120	46.67%	1528



**Table A12**  
**Breakout of Acres Leased and Transferred**

	Total Installation Acres	Acres to Transfer Out of DoD	Actual Acres Leased to Federal Entity	Actual Acres Leased to Non- Federal Entity	Total Acres Leased	Actual Acres Transferred to Federal Entity	Actual Acres Transferred to Non-Federal Entity	Total Acres Transferred
<b>Army</b>	1,140,533	143,882	1	10,444	10,445	18,390	6,609	24,999
Round I	137,562	37,547	0	4,474	4,474	9,368	584	9,952
Round II	40,612	34,325	1	1,802	1,803	8,952	4,287	13,239
Round III	26,155	2,573	0	1,580	1,580	0	709	709
Round IV	936,204	69,437	0	2,588	2,588	70	1,029	1,099
<b>Navy</b>	180,355	158,697	192	5,146	5,338	9,759	20,224	29,983
Round I	19,493	19,493	0	0	0	3,305	4,777	8,082
Round II	13,835	12,965	0	2,417	2,417	2,965	3,637	6,602
Round III	63,518	45,759	192	2,555	2,747	2,136	11,061	13,197
Round IV	83,509	80,480	0	174	174	1,353	749	2,102
<b>Air Force</b>	95,496	85,348	401	40,647	41,048	7,588	12,298	19,886
Round I	19,503	19,190	20	15,641	15,661	1,982	943	2,925
Round II	46,892	42,606	191	19,254	19,445	5,242	11,014	16,256
Round III	18,379	15,225	148	3,796	3,944	338	341	679
Round IV	10,722	8,327	42	1,956	1,998	26	0	26
<b>DLA</b>	1,858	1,814	0	1,673	1,673	0	0	0
Round I	--	--	--	--	--	--	--	--
Round II	--	--	--	--	--	--	--	--
Round III	87	87	0	10	10	0	0	0
Round IV	1,771	1,727	0	1,663	1,663	0	0	0
<b>Service Totals</b>	1,418,242	389,741	594	57,910	58,504	35,737	39,131	74,868
Round I	176,558	76,230	20	20,115	20,135	14,655	6,304	20,959
Round II	101,339	89,896	192	23,473	23,665	17,159	18,938	36,097
Round III	108,139	63,644	340	7,941	8,281	2,474	12,111	14,585
Round IV	1,032,206	159,971	42	6,381	6,423	1,449	1,778	3,227

**Table A13**  
**Comparison of Leased and Transferred Acres FY98 to FY99**

	Total Installation Acres	Acres to Transfer Out of DoD	Total Acres Leased FY98	Total Acres Leased FY99	% Change FY98-FY99	Total Acres Transferred FY98	Total Acres Transferred FY99	% Change FY98-FY99
<b>Army</b>	1,140,533	143,882	9,666	10,445	8.06%	22,443	24,999	11.39%
Round I	137,562	37,547	4,211	4,474	6.25%	9,913	9,952	0.39%
Round II	40,612	34,325	2,056	1,803	-12.31%	12,329	13,239	7.38%
Round III	26,155	2,573	2,291	1,580	-31.03%	41	709	1629.27%
Round IV	936,204	69,437	1,107	2,588	133.79%	160	1,099	586.88%
<b>Navy</b>	180,355	158,697	26,046	5,338	-79.51%	19,192	29,983	56.23%
Round I	19,493	19,493	6	0	-100.00%	8,005	8,082	0.96%
Round II	13,835	12,965	11,069	2,417	-78.16%	4,911	6,602	34.43%
Round III	63,518	45,759	6,258	2,747	-56.10%	5,501	13,197	139.90%
Round IV	83,509	80,480	8,713	174	-98.00%	775	2,102	171.23%
<b>Air Force</b>	95,496	85,348	41,947	41,048	-2.14%	12,709	19,886	56.47%
Round I	19,503	19,190	15,781	15,661	-0.76%	2,840	2,925	2.99%
Round II	46,892	42,606	22,149	19,445	-12.21%	9,181	16,256	77.06%
Round III	18,379	15,225	3,769	3,944	4.64%	662	679	2.57%
Round IV	10,722	8,327	248	1,998	705.65%	26	26	0.00%
<b>DLA</b>	1,858	1,814	1,232	1,673	35.80%	0	0	0.00%
Round I	--	--	--	--	--	--	--	--
Round II	--	--	--	--	--	--	--	--
Round III	87	87	10	10	0.00%	0	0	0.00%
Round IV	1,771	1,727	1,221	1,663	36.20%	0	0	0.00%
<b>Service Totals</b>	1,418,242	389,741	78,891	58,504	-25.84%	54,344	74,868	37.77%
Round I	176,558	76,230	19,998	20,135	0.69%	20,758	20,959	0.97%
Round II	101,339	89,896	35,274	23,665	-32.91%	26,421	36,097	36.62%
Round III	108,139	63,644	12,329	8,281	-32.83%	6,204	14,585	135.09%
Round IV	1,032,206	159,971	11,290	6,423	-43.11%	961	3,227	235.80%

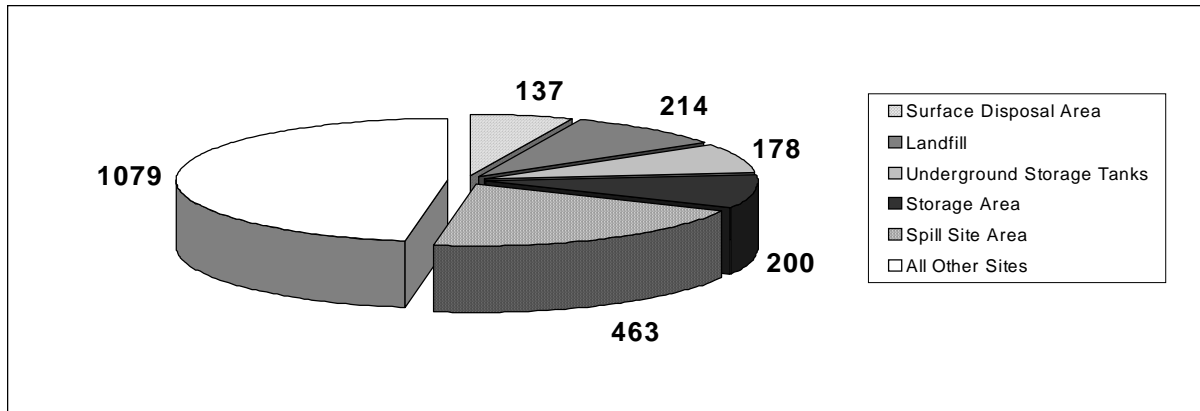
**Appendix B**  
**Environmental Restoration**  
**Site Information**

## Appendix B

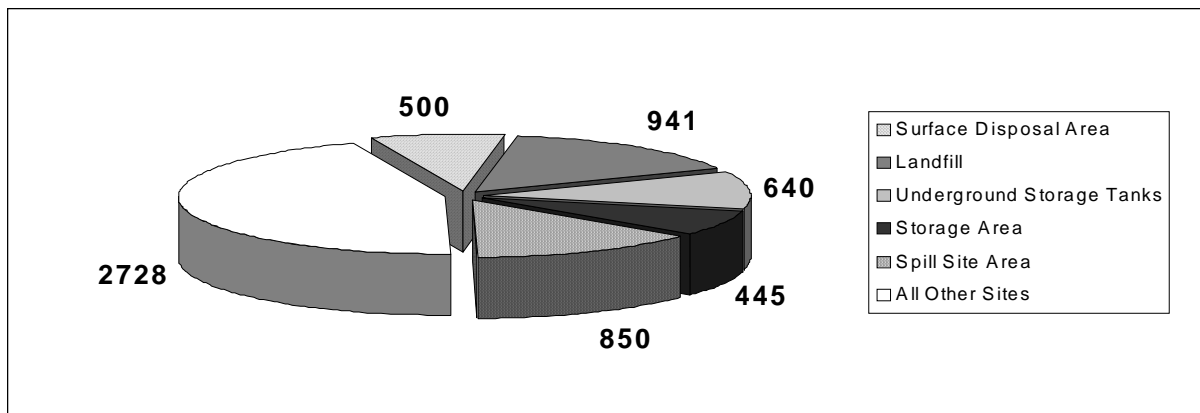
**Table B1**  
**Breakout of BRAC Site Types**

Site Type	Number of Sites
Above Ground Storage Tank	86
Burn Area	79
Building Demolition/Debris Removal	16
Chemical Disposal	29
Contaminated Buildings	291
Contaminated Fill	28
Contaminated Ground Water	112
Contaminated Sediments	104
Contaminated Soil Piles	38
Dip Tank	9
Disposal Pit and Dry Well	231
Drainage Ditch	29
Explosive Ordnance Disposal Area	47
Fire/Crash Training Area	107
Firing Range	26
Incinerator	36
Industrial Discharge	37
Landfill	382
Leach Field	19
Maintenance Yard	81
Mixed Waste Area	32
Oil/Water Separator	82
Optical Shop	1
Pesticide Shop	40
Pistol Range	10
Plating Shop	10
POL (Petroleum/Oil/Lubricants) Lines	62
Radioactive Waste Area	36
Sewage Effluent Settling Ponds	10
Sewage Treatment Plant	21
Small Arms Range	29
Soil Contamination After Tank Removal	40
Spill Site Area	794
Storage Area	525
Storm Drain	97
Surface Disposal Area	318
Surface Impoundment/Lagoon	63
Surface Runoff	21
Underground Storage Tanks	517
Underground Tank Farm	35
Unexploded Munitions and Ordnance Area	68
Washrack	29
Waste Lines	110
Waste Treatment Plant	63

**Figure B1**  
**BRAC In-Progress Site Types**



**Figure B2**  
**Active Installation In-Progress Site Types**



## Appendix B

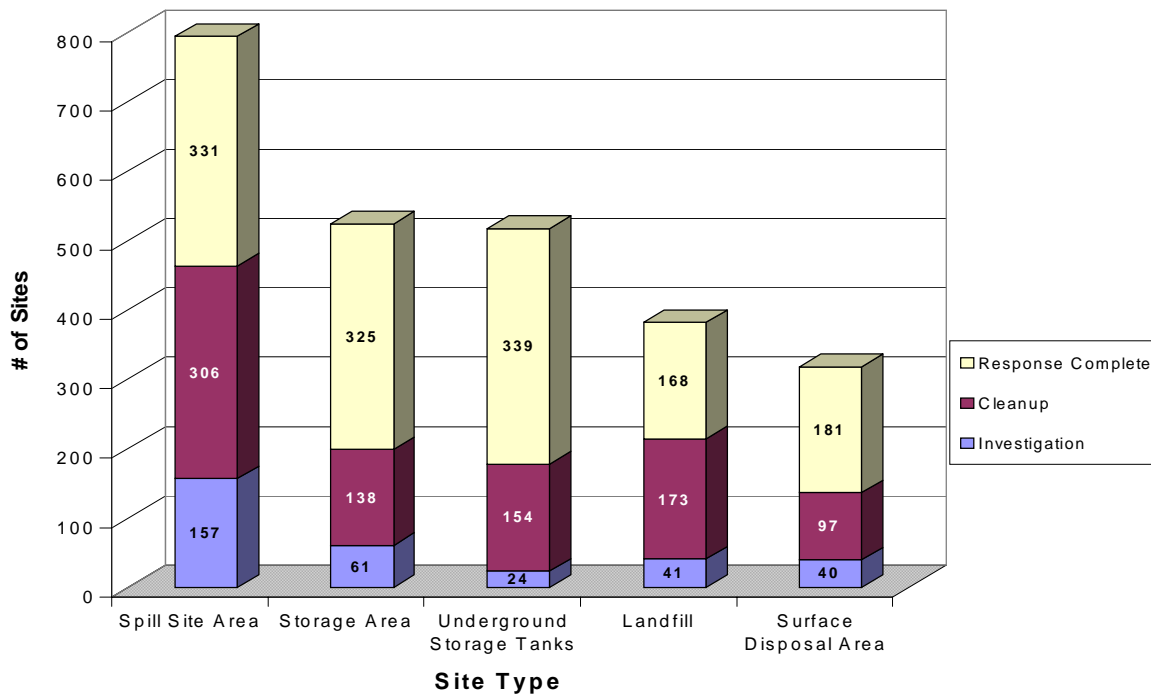
**Table B2**  
**Comparison of BRAC RC and In-Progress Sites**

Site Type	Total Sites	RC	% of Total	In Progress	% of Total
All Other Sites	2349	1270	54.07%	1079	45.93%
Landfill	382	168	43.98%	214	56.02%
Spill Site Area	794	331	41.69%	463	58.31%
Storage Area	525	325	61.90%	200	38.10%
Surface Disposal Area	318	181	56.92%	137	43.08%
Underground Storage Tanks	517	339	65.57%	178	34.43%
<b>Total</b>	<b>4885</b>	<b>2614</b>	<b>53.51%</b>	<b>2271</b>	<b>46.49%</b>

**Table B3**  
**Phase Activities at BRAC Installations**

Phase	Completed	Under Way	Future
	Sites (Interim Actions)		
<b>Investigation</b>	3,378	1,448	15
<b>Interim Action</b>	1,006 (1,383)	367 (524)	0
<b>Design</b>	615	149	594
<b>RA-C</b>	677	241	921
<b>RA-O</b>	43	138	565
<b>LTM</b>	55	138	834

**Figure B3**  
**Phase Status by Site Type**



**Appendix C**  
**Environmental Restoration**  
**Phase Durations**



## Appendix C

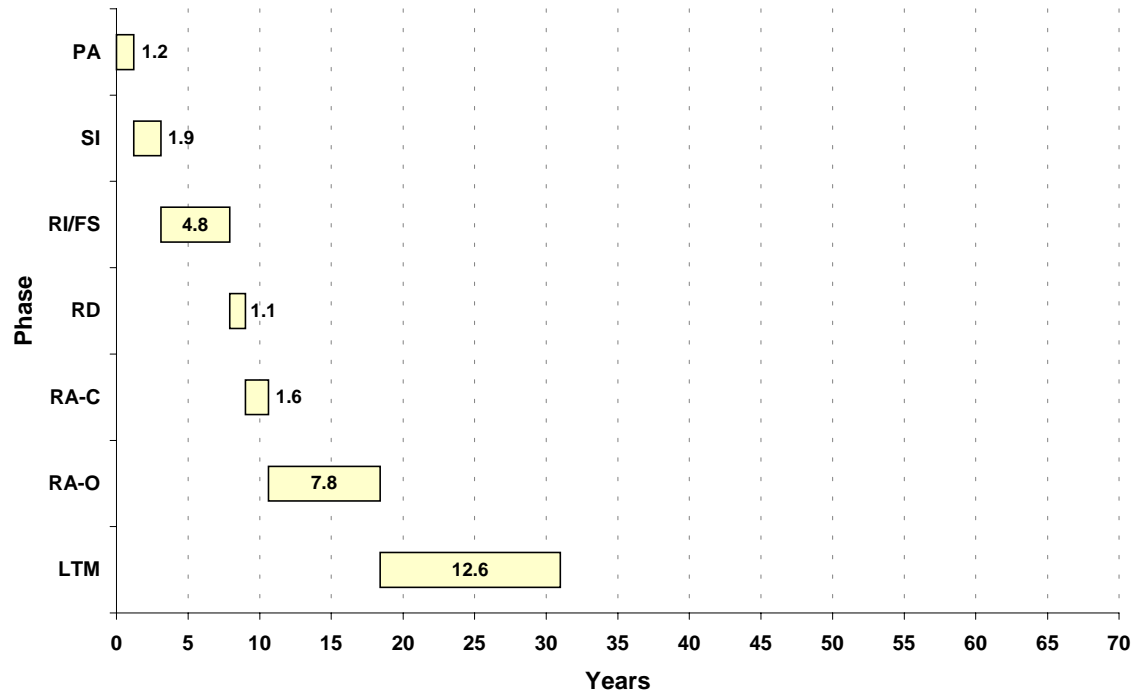
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The following graphs illustrate the average duration per restoration phase for sites at BRAC and active installations. The durations were computed by averaging the number of months spent per phase at each site. The first set of graphs for each Component illustrates only the average duration for each phase. The second set of graphs for each Component (those with gaps) illustrates the actual average duration for each phase *and* includes the average lag time between the end of one phase and the start of the next phase. These sets of graphs are presented for Army, Navy, Air Force, and the Defense Logistics Agency.

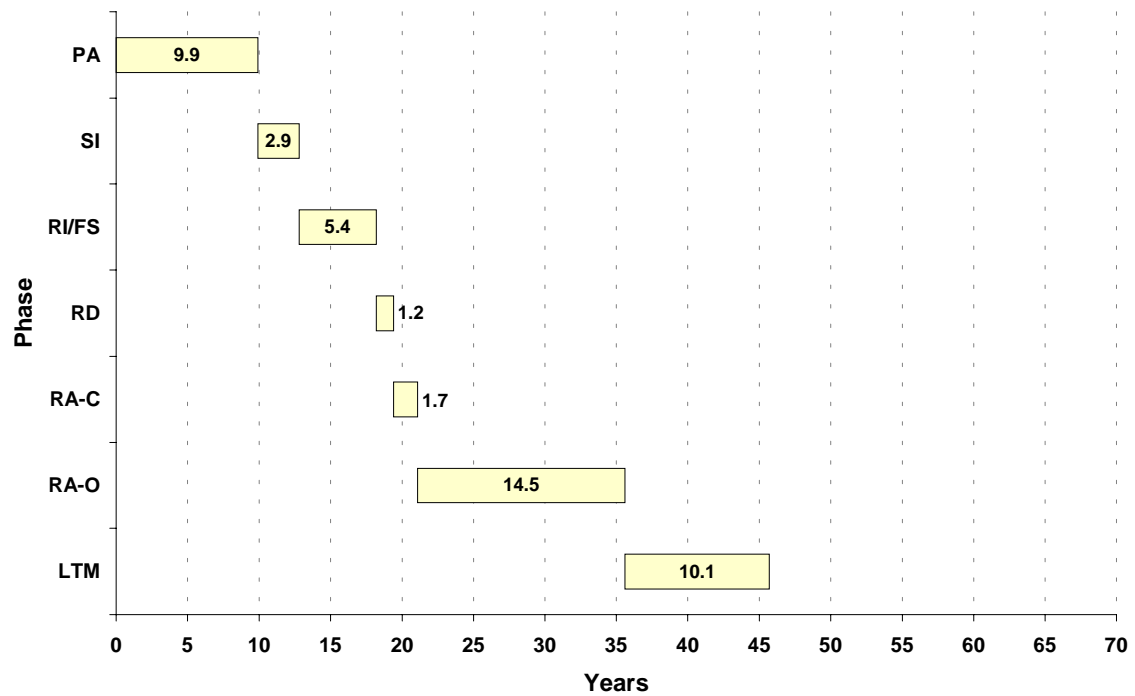
General trends for the Army, Navy, and DLA are:

- Phases are shorter for BRAC sites indicating quicker decision making, especially in the beginning phases of the CERCLA process
- Smaller “gaps” between site identification and site investigation for BRAC sites, indicating more coordinated management of site cleanup
- BRAC sites close out sooner than active installations illustrating a more total streamlined process.

**Figure C1**  
**Army BRAC Average Phase Duration**

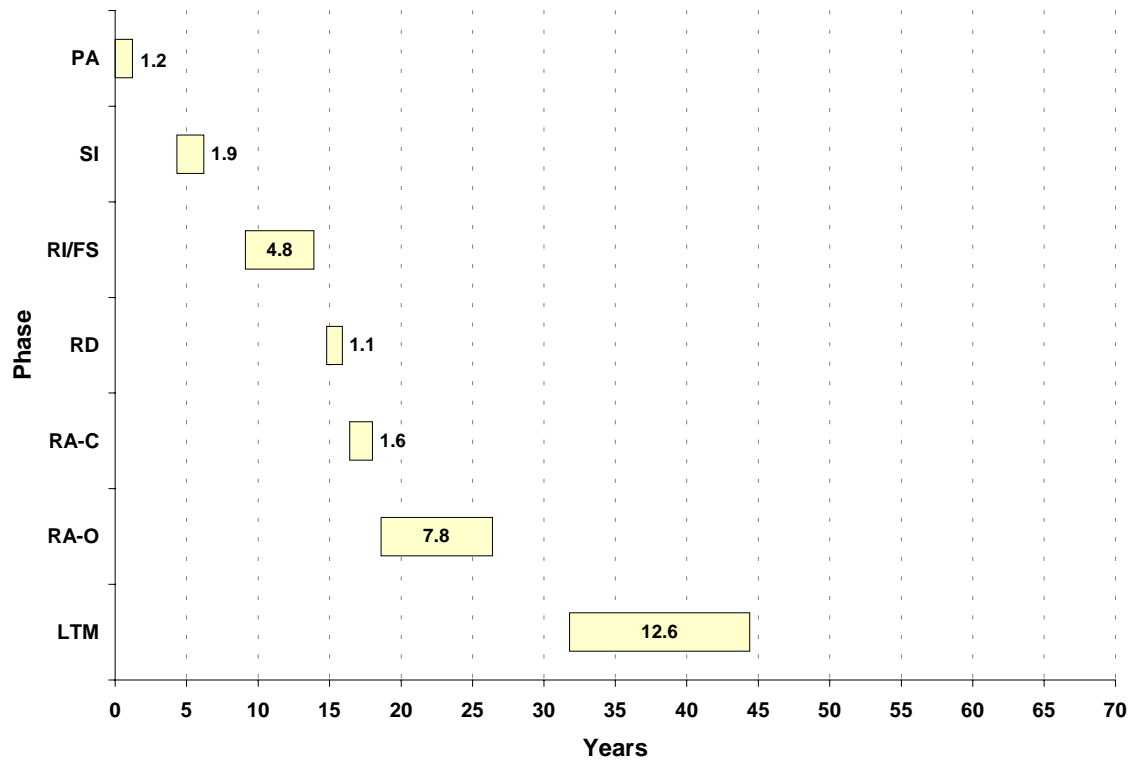


**Figure C2**  
**Army Active Installations Average Phase Duration**

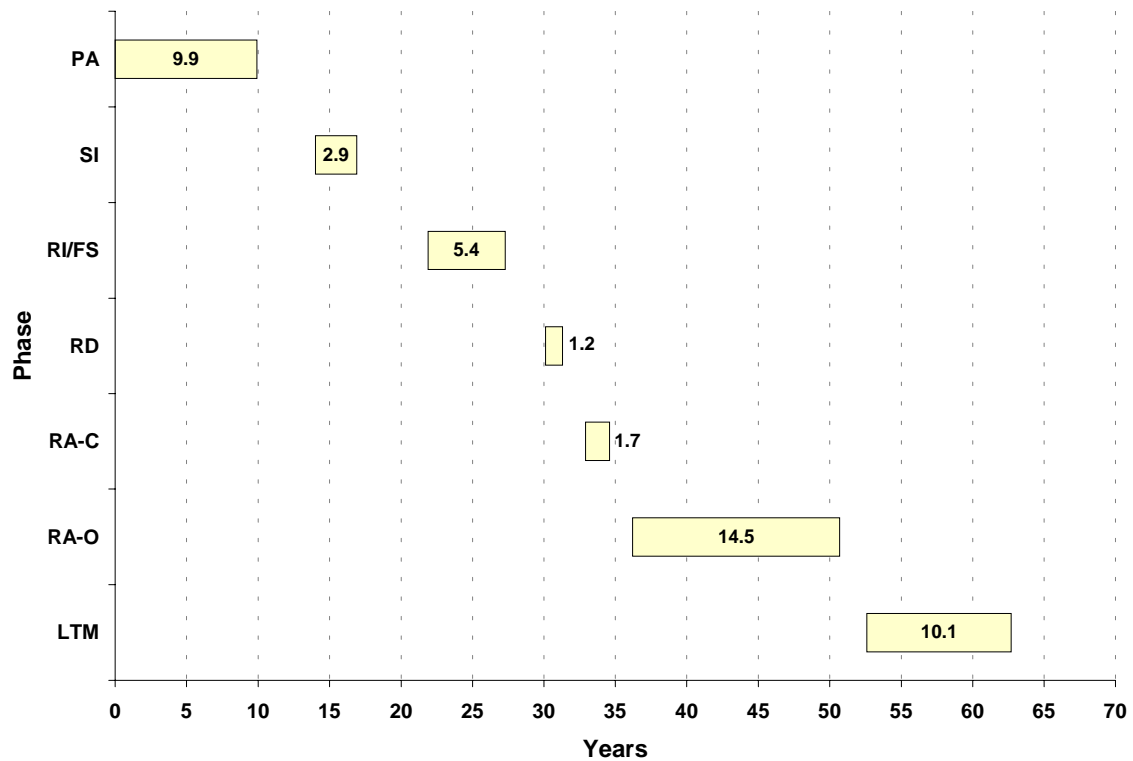


## Appendix C

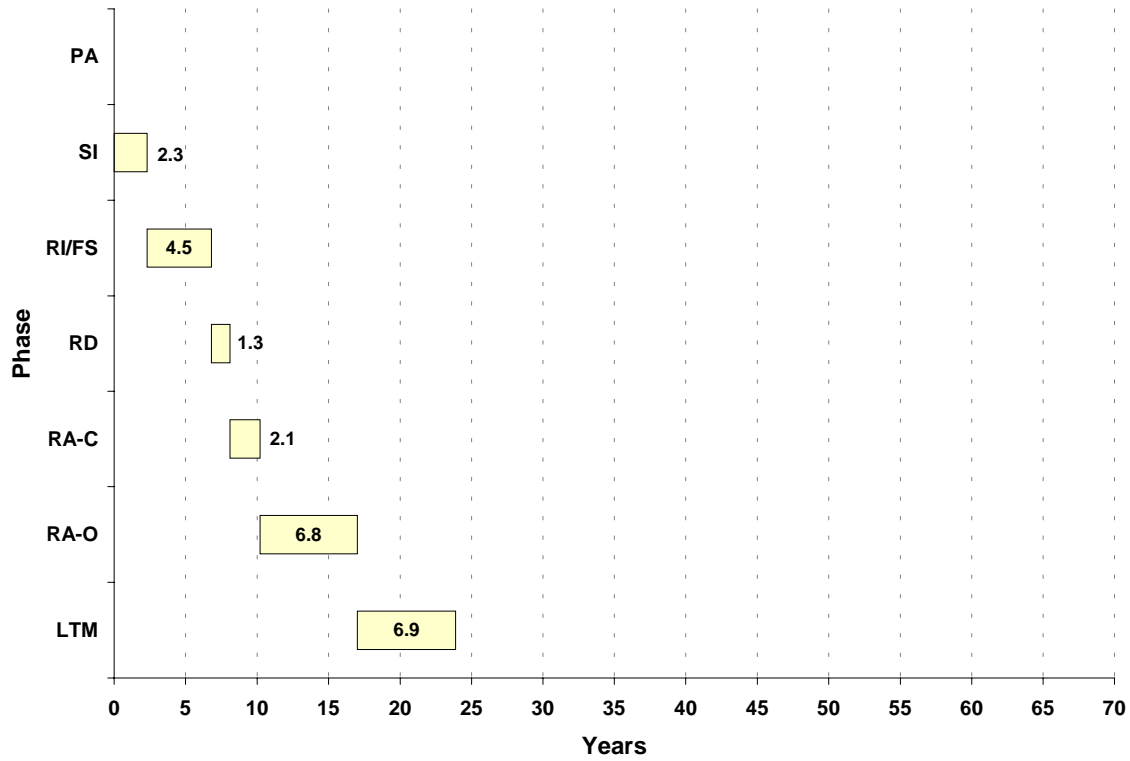
**Figure C3**  
**Army BRAC Average Phase Duration (with gaps)**



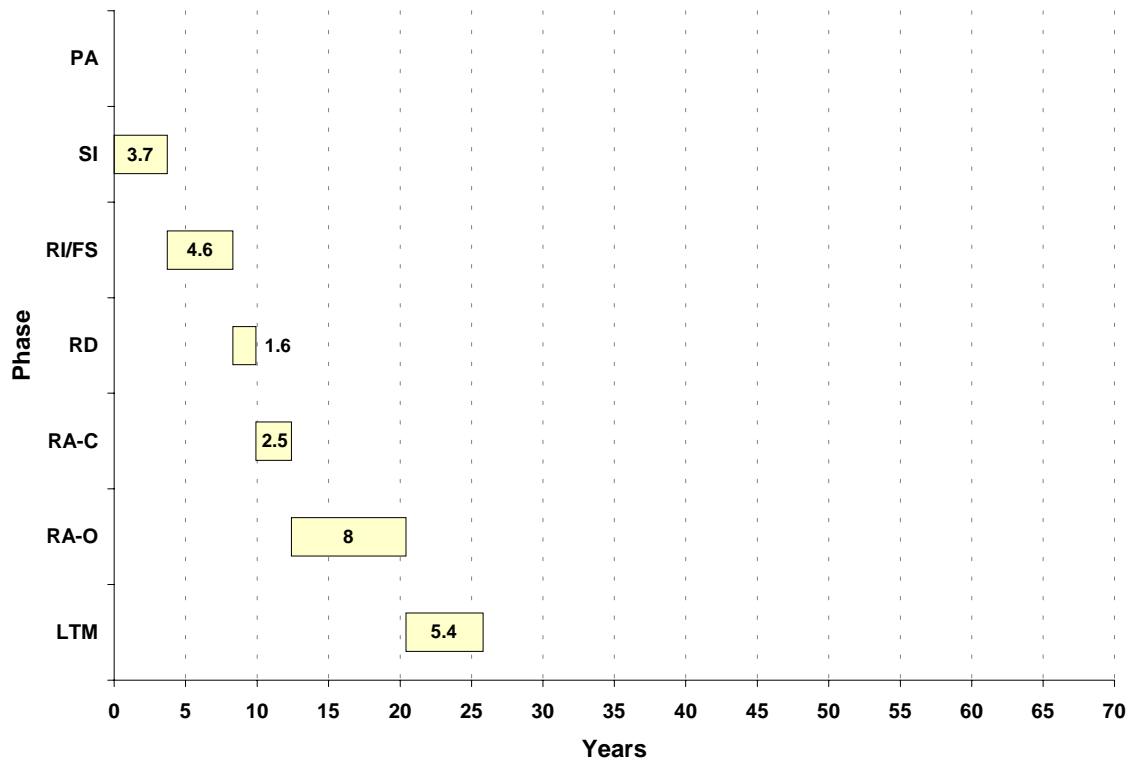
**Figure C4**  
**Army Active Installations Average Phase Duration (with gaps)**



**Figure C5**  
**Navy BRAC Average Phase Duration**

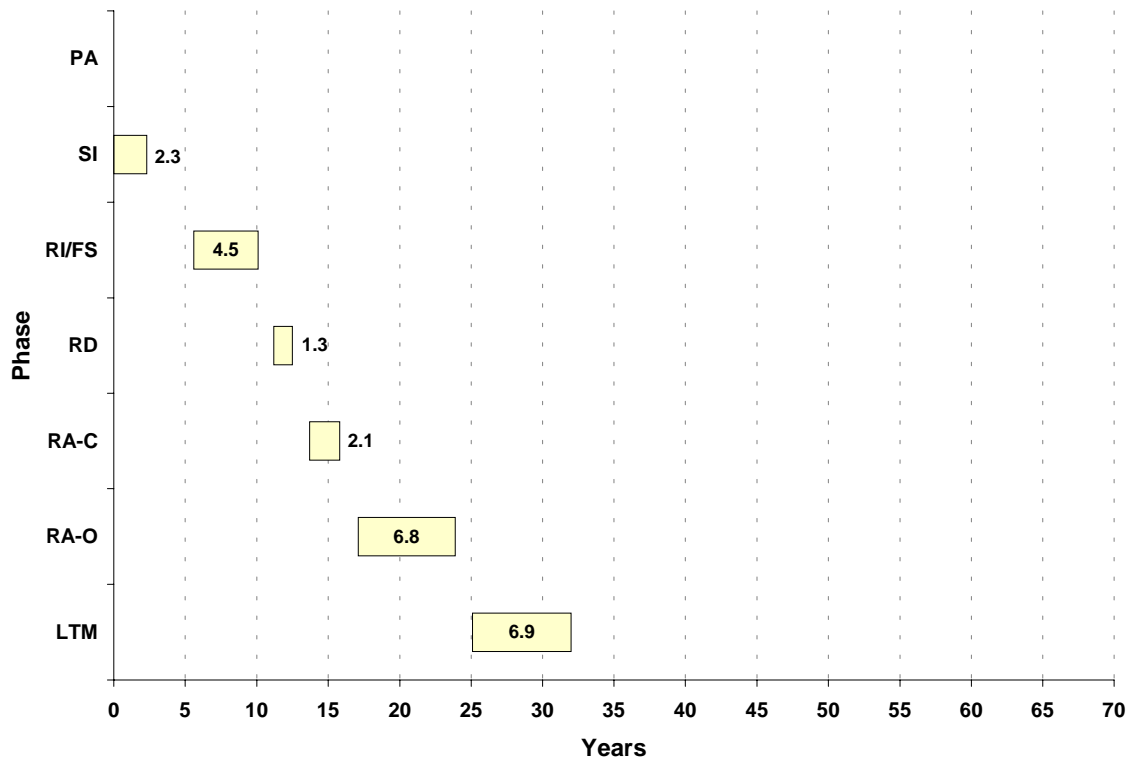


**Figure C6**  
**Navy Active Installations Average Phase Duration**

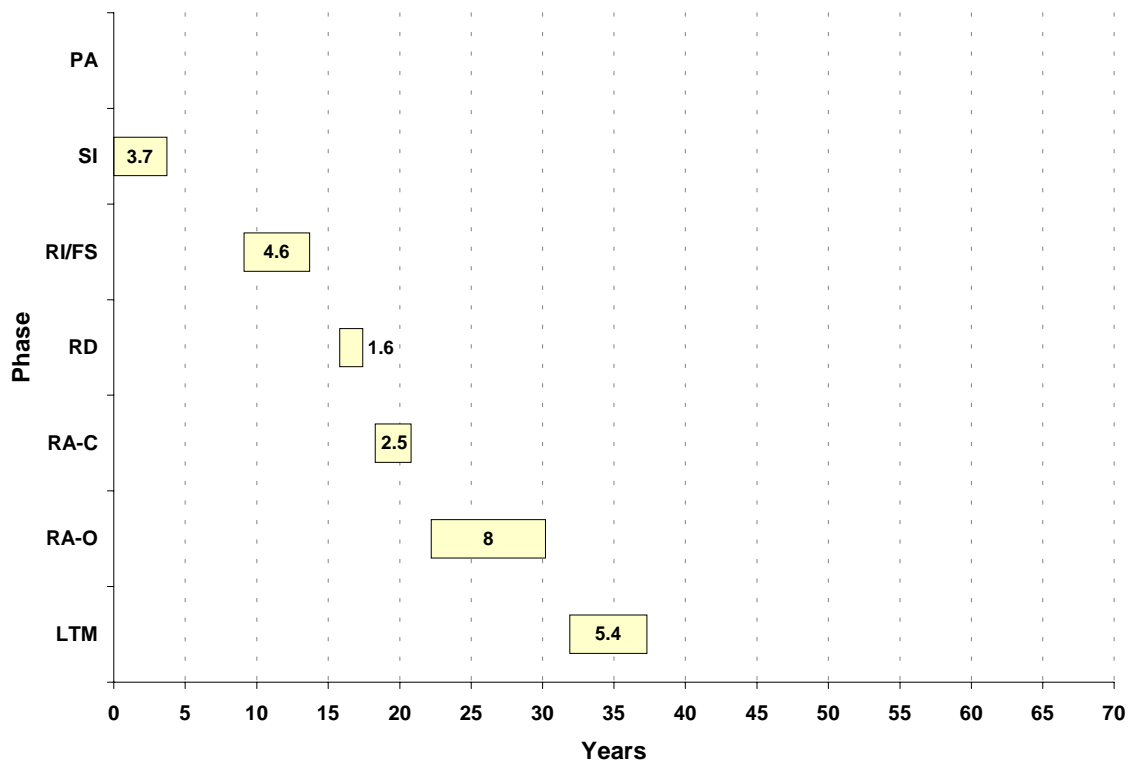


## Appendix C

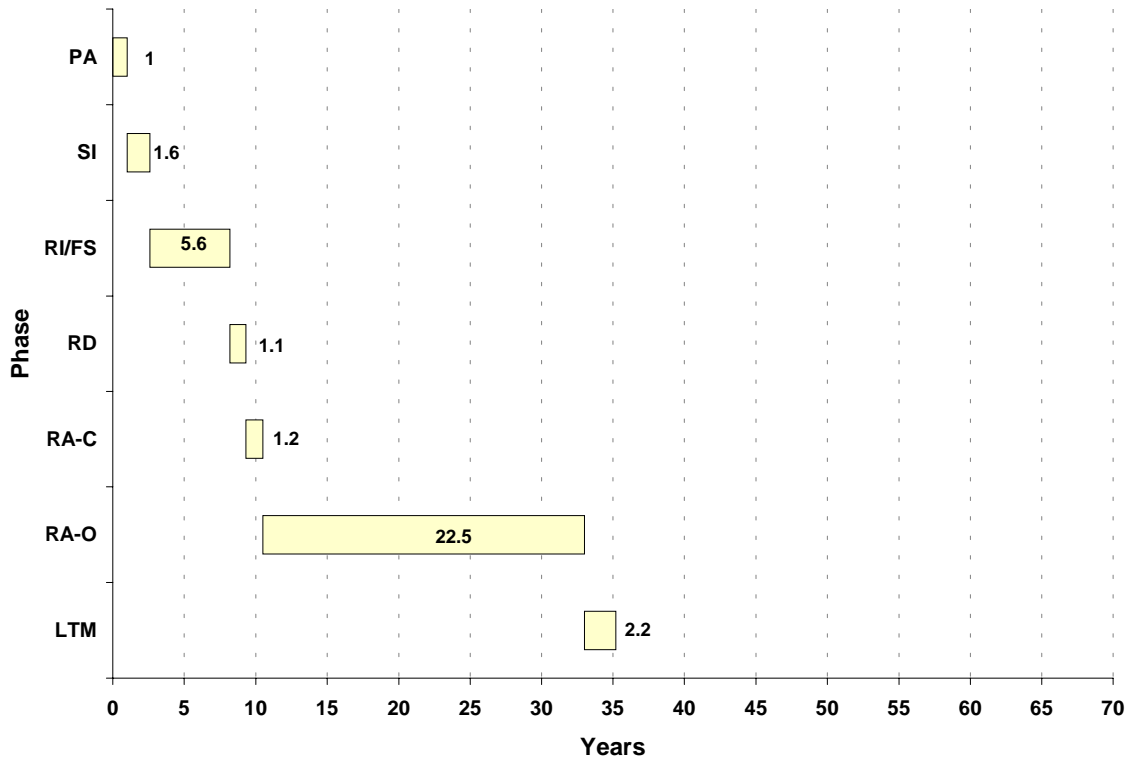
**Figure C7**  
**Navy BRAC Average Phase Duration (with gaps)**



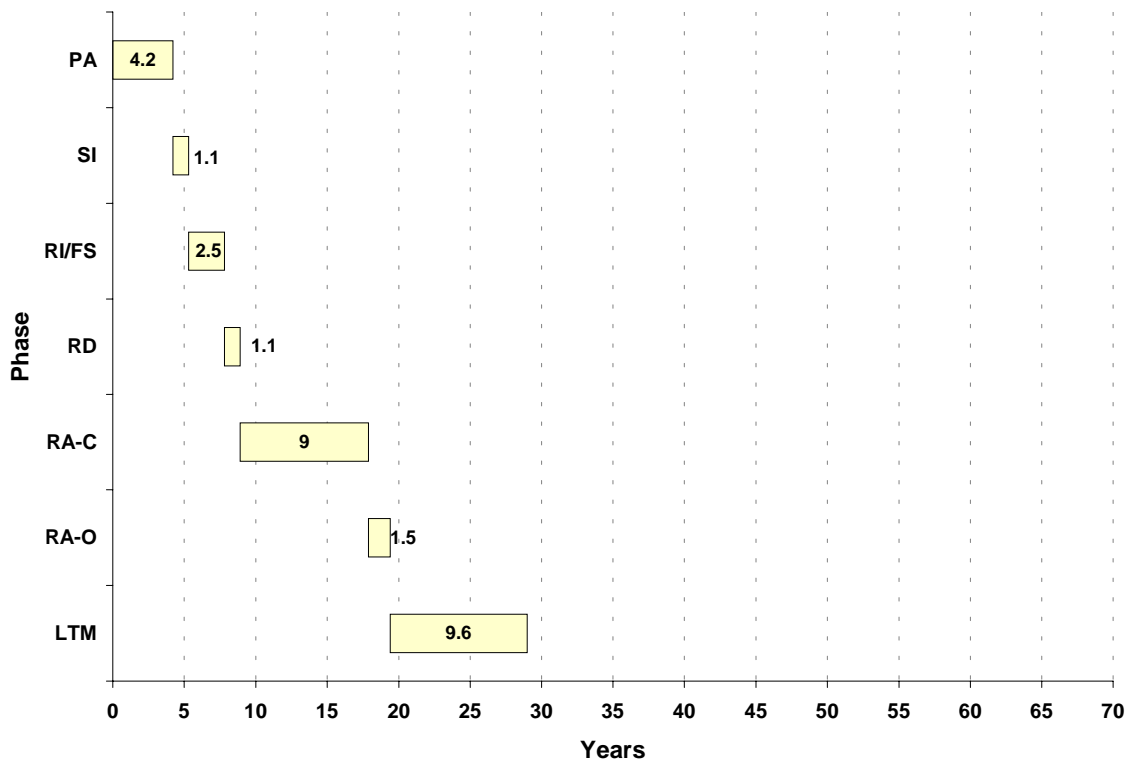
**Figure C8**  
**Navy Active Installations Average Phase Duration (with gaps)**



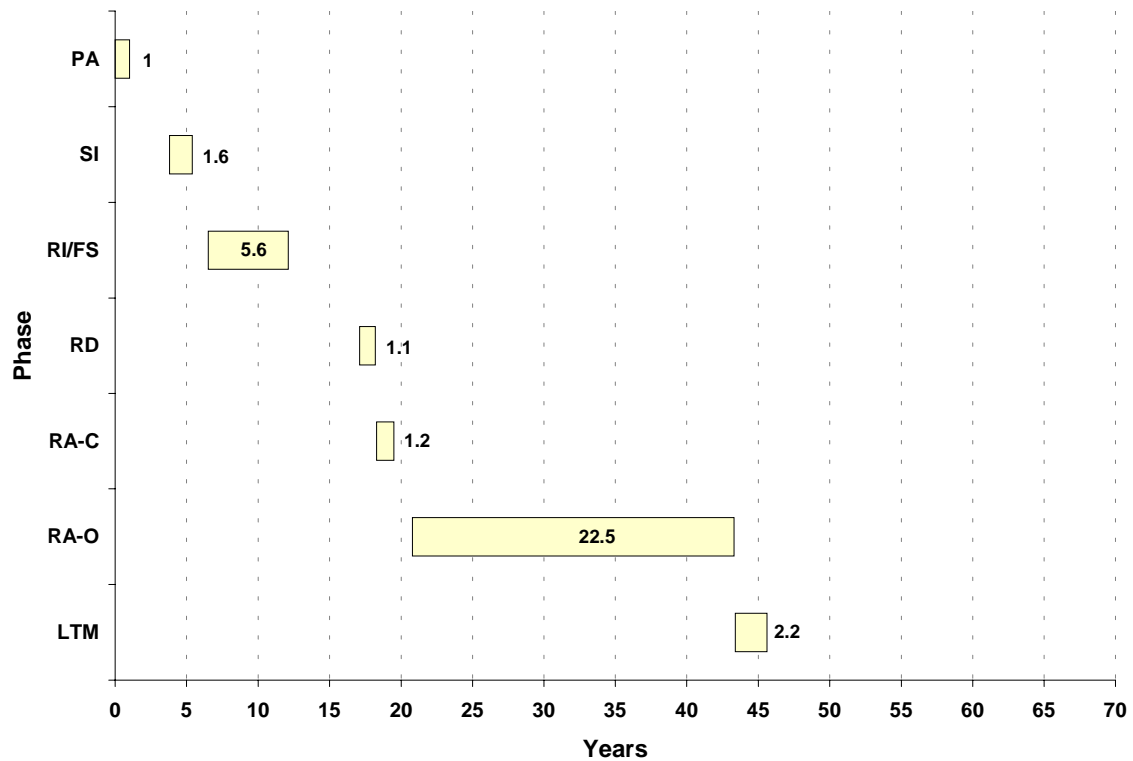
**Figure C9**  
**Air Force BRAC Average Phase Duration**



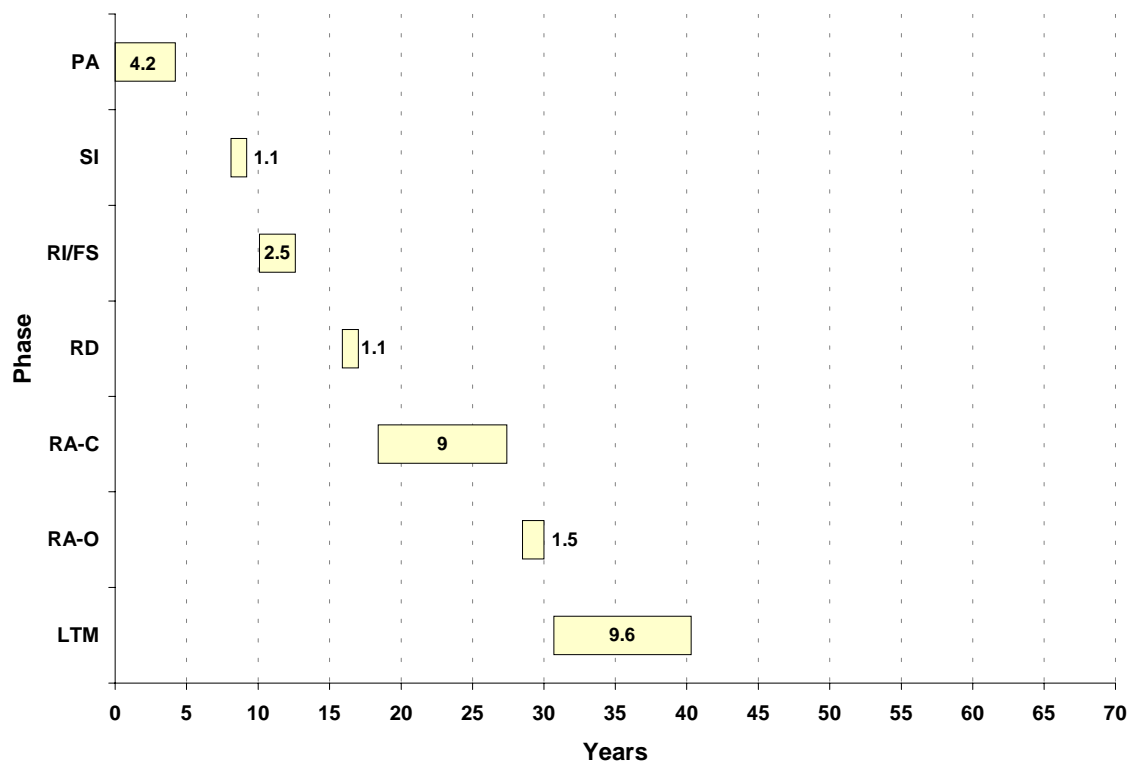
**Figure C10**  
**Air Force Active Installations Average Phase Duration**



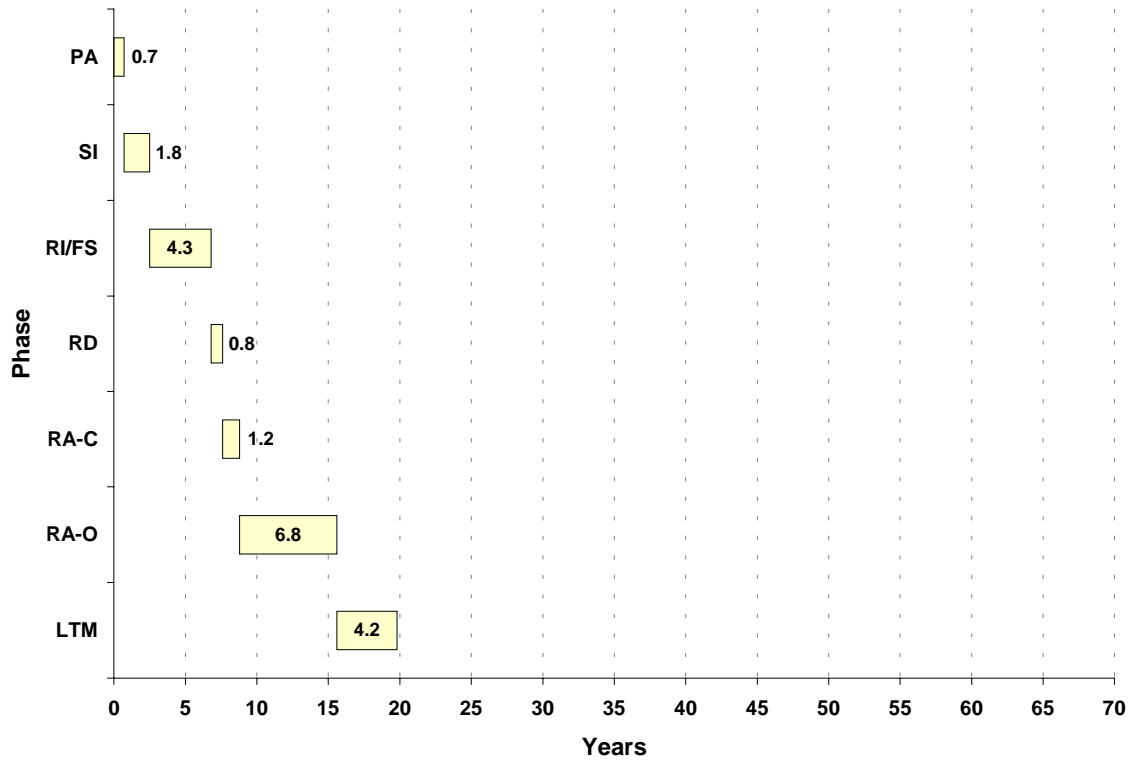
**Figure C11**  
**Air Force BRAC Average Phase Duration (with gaps)**



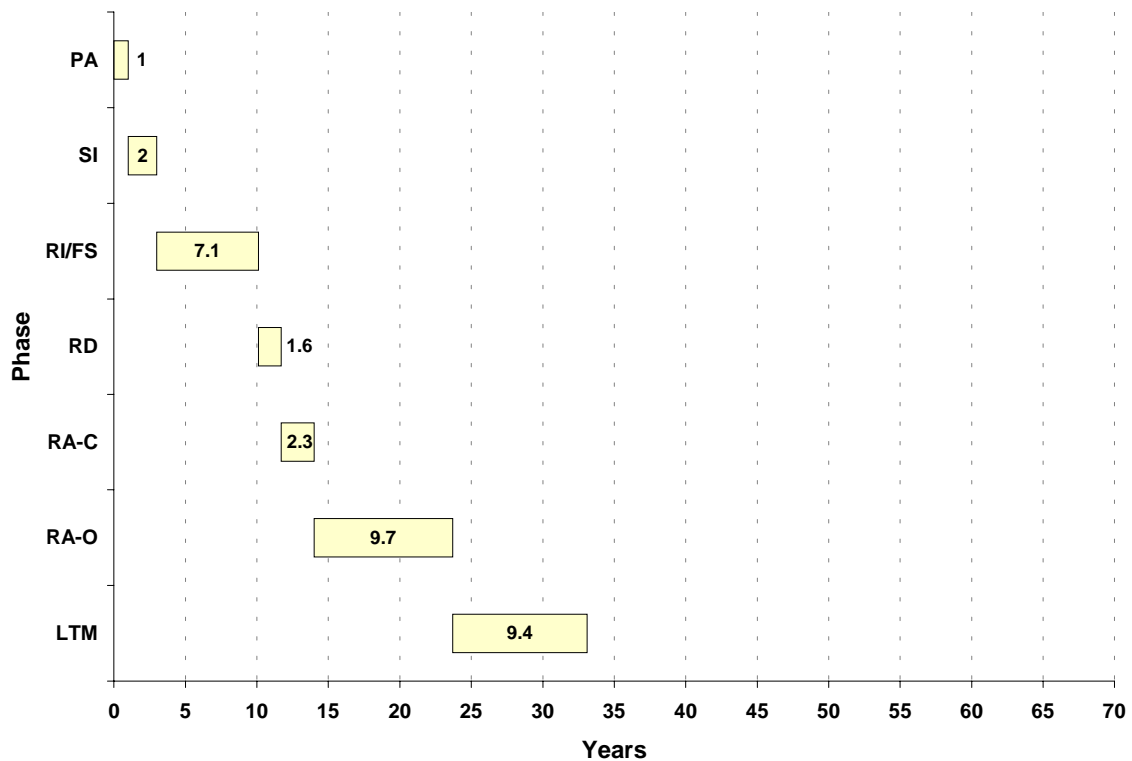
**Figure C12**  
**Air Force Active Installations Average Phase Duration (with gaps)**



**Figure C13**  
**DLA BRAC Average Phase Duration**

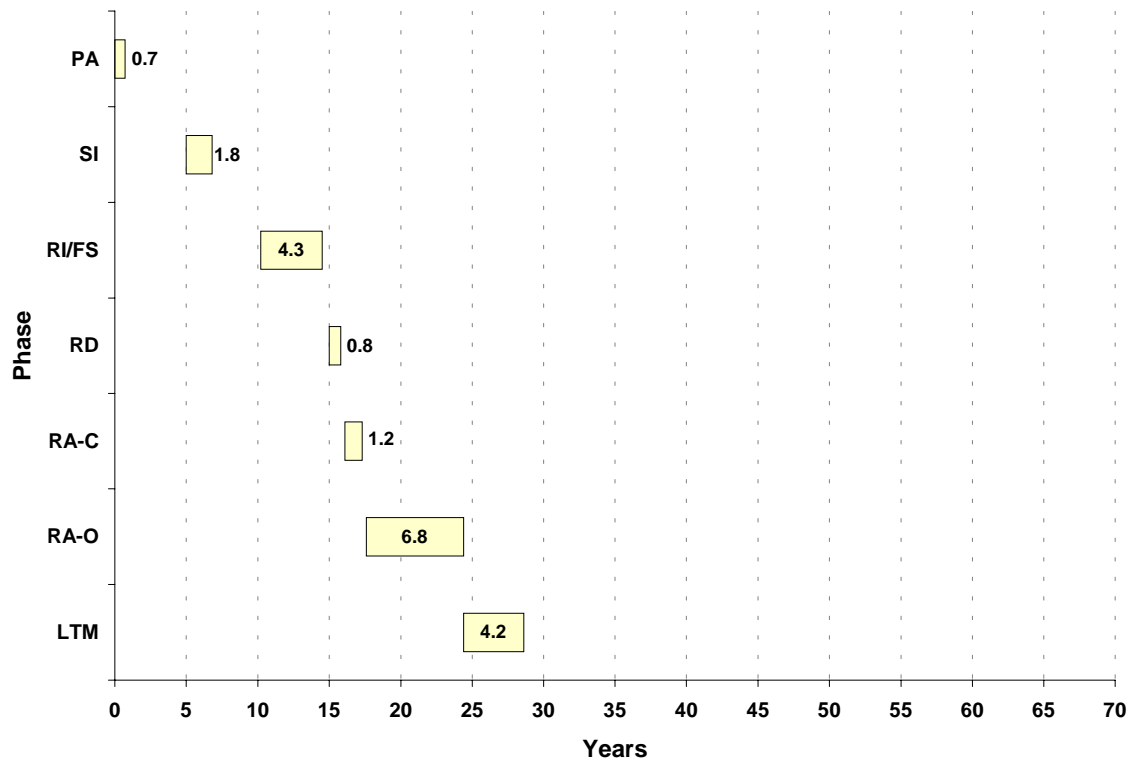


**Figure C14**  
**DLA Active Installations Average Phase Duration**





**Figure C15**  
**DLA BRAC Average Phase Duration (with gaps)**



**Figure C16**  
**DLA Active Installations Average Phase Duration (with gaps)**

